



**COLORADO**  
**Department of Revenue**  
Enforcement Division - Marijuana

# House Bill 14-1366 Marijuana Edibles Work Group Report

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## Table of Contents

<b>Table of Contents .....</b>	<b>2</b>
<b>Executive Summary .....</b>	<b>4</b>
<b>Acknowledgements .....</b>	<b>7</b>
<b>Introduction .....</b>	<b>8</b>
<b>The Multi-Stakeholder Process and Guiding Principles for Rule-Making .....</b>	<b>9</b>
<b>Regulation of Edible Marijuana Products Prior to 2014 Rule-Making .....</b>	<b>10</b>
<b>Retail Marijuana Product Potency and Serving Size Work Group .....</b>	<b>11</b>
<b>Permanent Rules for Retail Edible Marijuana Products.....</b>	<b>12</b>
<b>House Bill 14-1366 Work Group Process .....</b>	<b>14</b>
<b>Presentations to the Work Group .....</b>	<b>15</b>
<b>Symbols, Safe Storage, Childproof Packaging, and Labeling .....</b>	<b>15</b>
<b>Marijuana Industry Perspective on HB 14-1366.....</b>	<b>16</b>
<b>Unintentional Ingestion of Marijuana Products by Children .....</b>	<b>17</b>
<b>Intent of the Principal Sponsors of HB 14-1366 .....</b>	<b>18</b>
<b>Categorization of Edible Marijuana Products .....</b>	<b>19</b>
<b>Modalities for Identifying Edible Marijuana Products.....</b>	<b>20</b>
<b>Five Modalities for Identifying Edible Marijuana Products .....</b>	<b>20</b>
<b>Debate Over Legislative Intent .....</b>	<b>20</b>
<b>Strategies within Each Modality .....</b>	<b>21</b>
<b>Debate over “Practicable” .....</b>	<b>22</b>
<b>Four Strategic Options for Rendering Edible Marijuana Products Identifiable.....</b>	<b>23</b>
<b>1. Take No Action at this Time to Identify Edible Marijuana Products .....</b>	<b>24</b>
<b>2. Strengthen Packaging and Labeling Requirements .....</b>	<b>24</b>
<b>3. Identify Edible Marijuana Products Outside their Packaging .....</b>	<b>25</b>
<b>4. Limit or Ban Categories of Edible Marijuana Products or Particular Products .....</b>	<b>25</b>
<b>Additional Recommendation Categories .....</b>	<b>26</b>
<b>5. Increase Consumer Education .....</b>	<b>27</b>
<b>6. Improve Data Collection and Analysis .....</b>	<b>27</b>
<b>7. Other –Testing Facilities and Product Safety .....</b>	<b>27</b>
<b>Recommendations of the HB 14-1366 Work Group .....</b>	<b>27</b>
<b>No. 1 - Imprinting Some Categories of Edible Marijuana Products and Labeling Others.....</b>	<b>29</b>
<b>No. 2 - Consumer Education Campaigns .....</b>	<b>33</b>
<b>No. 3 - Marking Categories of Edible Marijuana Products and Methods for Marking .....</b>	<b>36</b>
<b>No. 4 - Marking Edible Marijuana Products Directly whenever Possible .....</b>	<b>44</b>
<b>No. 5 - Labeling to Require that Edible Marijuana Products Stay Within Original Packaging</b>	<b>48</b>
<b>No. 6 (Merged with No. 8) - Universal Symbol, Labeling, and Consumer Education .....</b>	<b>50</b>

<b>No. 7 - Take No Action at this Time, Labeling, and Consumer Education.....</b>	<b>54</b>
<b>No. 8 - (Merged with No. 6).....</b>	<b>57</b>
<b>No. 9 - Universal Symbol, Labeling, Data Collection, and Consumer Education .....</b>	<b>57</b>
<b>No. 10 - Limit Edible Marijuana Products to Lozenges and Tinctures .....</b>	<b>62</b>
<b>No. 11 - Labeling, Universal Symbol, and Data Collection .....</b>	<b>65</b>
<b>No. 12 - Data Collection and Analysis.....</b>	<b>69</b>
<b>No. 13- Allowing Non-Licensees to Use Marijuana Testing Facilities.....</b>	<b>73</b>
<b>No. 14 - Symbol, Packaging and Labeling, Identifying Outside Packaging, Product Safety, Product Advisory Commission, and Education .....</b>	<b>76</b>
<b>No. 15 - Imprinting Edible Marijuana Products with a Universal Symbol or Color and Prohibiting Products that Cannot be Imprinted or Colored .....</b>	<b>82</b>
<b>No. 16 - Packaging and Labeling, Marking Products, Limiting Products, Data Analysis, and Education.....</b>	<b>85</b>
<b>Public Comments .....</b>	<b>89</b>
<b>Closing Thoughts .....</b>	<b>103</b>
<b>Appendix A: HB 14-1366.....</b>	<b>105</b>
<b>Appendix B: HB 14-1366 Work Group Members .....</b>	<b>108</b>
<b>Appendix C: Work Group Meetings and Stakeholder Submission Deadlines .....</b>	<b>110</b>
<b>Appendix D: 2014 Marijuana Edibles Rules .....</b>	<b>111</b>
<b>Appendix E: Recommendation Template.....</b>	<b>138</b>
<b>Appendix F: Stakeholder Submission - Unintentional Pediatric Marijuana Exposures</b>	<b>139</b>
<b>Appendix G: Letter from Sponsors of HB 14-1366.....</b>	<b>140</b>
<b>Appendix H: Stakeholder Submission - Marijuana Edible Products.....</b>	<b>142</b>
<b>Appendix I: Mapping Exercise for Identifying Types of Marijuana Products .....</b>	<b>148</b>
<b>Appendix J: Stakeholder Submission - Marking Edible Marijuana Products .....</b>	<b>149</b>
<b>Appendix K: Stakeholder Submission - Marijuana-Infused and Regular Candies .....</b>	<b>155</b>
<b>Appendix L: Stakeholder Submission - Edible Marijuana Products with Identifying Symbols and Colors .....</b>	<b>156</b>
<b>Appendix M: Stakeholder Submission - Non-Marijuana Products with Identifying Symbols and Colors .....</b>	<b>157</b>
<b>Appendix N: Stakeholder Submission – Marking Edible Marijuana Products .....</b>	<b>158</b>
<b>Appendix O: Stakeholder Submission - Using Custom Molds for Chocolate or Baked Goods.....</b>	<b>162</b>
<b>Appendix P: Current Universal Symbol for which Revisions are Recommended.....</b>	<b>164</b>
<b>Appendix Q: Summary of Sub-Recommendations by Category.....</b>	<b>165</b>

## Executive Summary

**H**ouse Bill 14-1366 directed the State Licensing Authority to promulgate rules by January 1, 2016 requiring that edible retail marijuana products be clearly identifiable, when practicable, with a standard symbol indicating that they contain marijuana, are not for consumption by children, and are safe for consumers. To assist in this process, the bill directed the State Licensing Authority to convene a multi-stakeholder group to make recommendations and give input for the forthcoming rules.

This report contains the findings of the HB 14-1366 Work Group that was convened for this purpose between August and November 2014, which included representatives of the Colorado Department of Public Health and Environment, retail marijuana store licensees, retail marijuana products manufacturers licensees, child abuse prevention experts, and advocates for children's health. Documentation of this group's work is available at <https://www.colorado.gov/pacific/enforcement/MEDrulemaking>.

The Work Group employed the Marijuana Enforcement Division's four guiding principles for rulemaking when considering its recommendations for future rules related to edible retail marijuana products, namely that rules should be (1) Defensible, (2) Operable, (3) Transparent, and (4) Systematic, both for regulators and licensees.

They were also asked to consider these five key elements of HB 14-1366 while making recommendations: (a) Protecting from unintentional ingestion; (b) ensuring that products are readily identifiable; (c) making it clear that products contain marijuana and are not for consumption by children; (d) making it clear that products are safe for consumers; and (e) utilizing a universal symbol.

A total of 15 recommendations and 44 sub-recommendations from the Work Group Members are presented in this report for the consideration of the Colorado General Assembly and the State Licensing Authority. Also included are a summary of the Supporting and Dissenting Comments received by Work Group members for each of the recommendations and a summary of the public comments received.

The recommendations fall under four strategic options for identifying edible retail marijuana products, ranging from the least to the most restrictive:

1. Take no action at this time to identify edible marijuana products, allowing time to determine if the rules effective October 30, 2014 are sufficient for the public to identify these products and prevent accidental ingestion.
2. Strengthen packaging and labeling requirements for edible marijuana products.
3. Identify edible marijuana products outside their packaging by marking, shaping or coloring all products that can be readily marked, shaped, or colored.



4. Limit or ban categories of edible marijuana products or particular edible marijuana products if they cannot be rendered clearly identifiable outside their packaging by marking, shaping, or coloring.

Contributing to this range of options was a lack of clarity over the legislative intent of HB 14-1366 on the following two points: (1) whether edible retail marijuana products must be identifiable outside their packaging; and (2) what should be done regarding those edible retail marijuana products that cannot be made readily identifiable outside their packaging. HB 14-1366 also failed to define the term “practicable” as it relates to identifying marijuana products, leading to different recommendations from the group about which products can be marked, shaped, or colored.

The recommendations also fall into three additional categories that lie outside the scope of HB 14-1366, but that may be of interest to the General Assembly and the State Licensing Authority:

5. Increase the level of consumer education about the proper uses of and dangers related to edible marijuana products.
6. Improve data collection and analysis related to edible marijuana product use, misuse, and accidental use.
7. Other recommendations related to the use of licensed marijuana testing facilities and ensuring product safety.

Also included in this report is a summary of important developments related to rule-making for edible retail marijuana products preceding the formation of the HB 14-1366 Work Group, including a brief re-cap of the rules that were in place early in 2014 related to packaging, testing, and labeling, the work of the Product Potency and Serving Size Work Group in 2014, and the rule-making process in 2014 that revised many of the rules related to edible retail marijuana products.

To facilitate the forthcoming rule-making process mandated under HB 14-1366, the Co-Chairs of the Work Group request that the General Assembly consider the four strategic options presented in this report and indicate through legislation which options should be pursued at this time. The choice of strategic options will have a significant bearing on the rule-making process.

The Co-Chairs also request clarification from the General Assembly on the following issues:

1. Whether edible retail marijuana products must be identifiable outside their packaging;
2. What should be done regarding those edible retail marijuana products that cannot be made readily identifiable outside their packaging; and

3. A clearly articulated definition of “practicable” as used in HB 14-1366 and to be used in the forthcoming rule-making process.

Finally, the Co-Chairs would like to draw attention to the extensive discussion in the Work Group about the need to simplify the labeling requirements currently outlined in statute, and whether there might be a need for the State Licensing Authority to have greater ability to address labeling requirements in rule, in order to respond more quickly to evolving needs.

Clarification about which of the strategic options for identifying edible retail marijuana products should be pursued at this time, and about the additional issues listed above will greatly assist the MED and the Department of Revenue to proceed with the rule-making process mandated under HB 14-1366.

## Acknowledgements

The Co-Chairs would like to thank all of the members of the HB 14-1366 Work Group for the considerable time and effort they put into the Work Group meetings and in formulating and responding to the recommendations contained in this report. We would also like to express our gratitude to Dr. Lisa McCann of CS Policy for her skills and diligence in summarizing the work of the group and writing this report.

Our thanks also go out to the many staff members who provided support to the Work Group and to the production of this report, including Shannon Pfeiffer and Corrie Martinez of the Marijuana Enforcement Division, Mia Tsuchimoto, Wendy Spaulding, Saskia Young, and Natriece Bryant of the Colorado Department of Revenue, and Skyler McKinley of the Governor's Office of Marijuana Coordination.

## Introduction

**H**ouse Bill 14-1366, signed by Governor Hickenlooper on 5/21/2014, directed the State Licensing Authority to promulgate rules by January 1, 2016 requiring that edible retail marijuana products be clearly identifiable, when practicable, with a standard symbol indicating that they contain marijuana and are not for consumption by children (see Appendix A for the full text of HB 14-1366).

The legislative declaration of the bill stated the intent of the General Assembly: (1) that any person engaged in the sale of marijuana or its derivatives shall not explicitly or implicitly market or offer for sale these products to anyone under the age of 21; and (2) that the General Assembly should protect people from the unintentional ingestion of edible retail marijuana products and ensure that edible retail marijuana products are readily identifiable by the general public.

HB 14-1366 directed the State Licensing Authority to convene a stakeholder group no later than August 1, 2014 to develop recommendations for rules on how edible retail marijuana products can be clearly identifiable, when practicable, to indicate that they contain marijuana, are not for consumption by children, and are safe for consumers. The State Licensing Authority hereby submits its findings to the Health and Human Services Committee of the Senate and the Health Insurance and Environment Committee of the House of Representatives.

The stakeholder group was to consist of representatives of the Colorado Department of Public Health and Environment (CDPHE), retail marijuana store licensees, retail marijuana products manufacturers licensees, child abuse prevention experts, and advocates for children's health.

The Marijuana Enforcement Division (MED) made inquiries and solicited interest from a wide variety of stakeholders in each of the above categories in order to make an optimal selection of members for the HB 14-1366 Work Group, which commenced

its work on August 1, 2014. The meetings were co-chaired by the Deputy Senior Director of Enforcement for the Colorado Department of Revenue and the Director of the MED. The Executive Director of the Colorado Department of Revenue participated in several meetings, and a number of persons external to the group were asked to present information on specific

### **Mandate of the HB 14-1366 Work Group**

Develop recommendations for rules on how edible retail marijuana products can be clearly identifiable, when practicable, to indicate that they:

- I. Contain marijuana
- II. Are not for consumption by children
- III. Are safe for consumers

topics. Appendix B lists the members of the Work Group and persons who supported the work of the group. The public was invited to provide comments at each of the meetings, as well as in writing to the MED.

The Work Group met four times between August 1 and November 17 to develop and discuss the recommendations submitted by members of the Work Group, which are summarized and included in this report. The schedule of meetings and key actions taken by the Work Group are included in Appendix C, and full documentation of the meetings, recommendations, comments submitted by Work Group members, and public comments is available at <https://www.colorado.gov/pacific/enforcement/MEDrulemaking>.

In the following sections, important developments prior to the formation of the HB 14-1366 Work Group will be reviewed, including regulations related to the packaging, testing, and labeling of edible retail marijuana products, as well as the prior work group and rule-making process in 2014 related to limiting the potency and serving sizes of retail marijuana products. After this background is presented, the work process and recommendations of the HB 14-1366 Work Group will be presented.

## **The Multi-Stakeholder Process and Guiding Principles for Rule-Making**

Since convening the Amendment 64 Task Force late in 2012, the Department of Revenue and the MED have continued to use a multi-stakeholder approach in a variety of rulemaking processes related to the regulation of marijuana and other issues in Colorado. By bringing together regulators, licensees, and stakeholders from a variety of organizations, representing a variety of interests, the Department seeks to produce more effective rules and secure a greater level of compliance among licensees.

The MED has established four guiding principles to focus this type of multi-stakeholder deliberation of complex rule-making issues, and to create rules that balance consumer protection and public safety with impacts on the licensed community. Proposed rules should be (1) Defensible, (2) Operable, (3) Transparent, and (4) Systematic, both for regulators and licensees. See the text box below for further explanation of each principle.

These principals were used to guide the rule-making process for retail marijuana product potency and serving sizes in the first half of 2014, and by the HB 14-1366 Work Group when considering their recommendations for this report.

### **MED Guiding Principles for Rule Making**

**\*\*Principles are applied to both regulators and licensees\*\***

#### **1. Defensible**

- Rules are grounded in law and regulatory actions can be defended in a court of law
- Recognized research methods are applied and rules can withstand the scrutiny of legal and scientific communities
- When licensees consistently adhere to the rules, they can have reasonable certainty that the MED will find them in compliance

#### **2. Operable**

- Rules can be integrated into licensees' business processes and are the least restrictive form of regulation consistent with protecting the public
- Rules can be readily monitored and enforced by the MED

#### **3. Transparent**

- Rules clearly articulate what is required and expected of licensees
- Licensees' operations, business transactions, books, and records are open for monitoring and inspection by the MED

#### **4. Systematic**

- Rules leverage technology to facilitate implementation
- Rules are planned and methodical
- Rules are repeatable and licensees are able to apply them consistently

## **Regulation of Edible Marijuana Products Prior to 2014 Rule-Making**

MED 1 CCR 212-2, Permanent Rules Related to the Colorado Retail Medical Code, Rules R 1001, 1004, and 1006 outline the packaging and labeling requirements for retail marijuana products, which include edible retail marijuana products. These rules were first promulgated in 2013, pursuant to §12-43.4-202(3)(c)(III)(A-B) and §12-43.4-202(3)(a)(VII)(A-O), C.R.S.

The original 2013 rule R 1004 applied to manufacturers and outlined packaging requirements for all types of retail marijuana products, without distinguishing between edible and non-edible products. It did not require child-resistant packaging, but required manufacturers to

ensure that each product was individually packaged in a sealed container with the required labels before being transferred or transported to another Retail Marijuana Establishment.

The original 2013 rule R 1006 provided for packaging and labeling of products by Retail Marijuana Stores, and also did not stipulate different requirements for edible and non-edible products. It did require child-resistant packaging either around the product itself, or in the form of an exit package to be provided at the point of sale. Thus, in the previous set of rules, the responsibility for child-resistant packaging and most of the labeling was born by Retail Marijuana Stores rather than manufacturers.

The MED rules adhered to the mandates of §12-43.4-202(3)(c)(V), C.R.S., which requires that each retail marijuana product contain no more than 100 milligrams of active THC, and that the standardized marijuana serving size be no more than 10 milligrams. However, the previous MED rules did not provide for specific labeling requirements regarding the total number of servings in an edible marijuana product. Nor did they require that each serving size be made readily apparent on the product or through the packaging of individual servings.

In addition to the above regulations for packaging, labeling, potency, and serving sizes, the MED rules included provisions related to testing for potency, homogeneity, and the presence of contaminants. Rule R 1503 required potency testing starting May 1, 2014 for each production batch of edible marijuana products, to ensure that the product contains the advertised amount of THC, and that it does not exceed the 100 milligram limit. Homogeneity testing was also required, starting on July 14, 2014, to ensure that the indicated levels of THC are distributed evenly in the product. Rule R 1501, which is still being implemented, placed the responsibility on the edible marijuana product manufacturer to undergo contaminant testing for microbials, molds, mildew, filth, and residual solvents, either on each production batch of edible marijuana products or through process validation.

It should be noted that these rules are specific to retail edible marijuana products and do not pertain to medical marijuana edible products.

## **Retail Marijuana Product Potency and Serving Size Work Group**

In response to two high-profile deaths in Colorado early in 2014 in which the use of edible marijuana products was involved, and prior to the passage of HB 14-1366, the State Licensing Authority exercised its rule-making authority to undertake an emergency rule-making process, administered by the MED, to address the threat to public safety presented by the prevalence of high levels of THC in small serving sizes of numerous edible retail marijuana products on the market.

To gain input for this rule-making process, the MED proactively formed the Retail Marijuana Product Potency and Serving Size Work Group on April 28, 2014. This group was charged to discuss and consider reasonable amounts of active THC in edible retail marijuana products in proportion to serving size. Its work was an important pre-cursor to that of the HB 14-1366 Marijuana Edibles Work Group formed later in 2014.

The composition of the Product Potency and Serving Size Work Group was similar to that of the HB 14-1366 Work Group, with a diverse range of stakeholders representing important public health and safety issues related to potency and serving sizes for edible marijuana products. It included MED and CDPHE staff members, state legislators, law enforcement representatives, health and medical experts, child health advocates, and marijuana industry representatives. This working group met on four occasions between April 30 and June 18 and applied the above-mentioned MED guiding principles for rule-making during its discussions. It provided valuable input to the emergency rules that were filed and adopted on July 31 and took effect on August 1, 2014.

The MED held a permanent rulemaking hearing for these rules on September 2, 2014. After considering oral comments provided at the public hearing, written comments received through the formal rulemaking process, and the hearing officer's report, the State Licensing Authority adopted permanent rules for edible retail marijuana products on September 30, 2014, which became effective on October 30, 2014. Retail marijuana product manufacturers were given an additional three month period to adjust to the regulatory changes, and manufacturers and stores were obliged to comply with the new rules no later than February 1, 2015.

## Permanent Rules for Retail Edible Marijuana Products

The Permanent Edible Marijuana Product Rules provide an important foundation to the work of the HB 14-1366 Marijuana Edibles Work Group. These are the primary outcomes of the promulgation of these rules:

1. Limiting the serving size of an edible retail marijuana product to 10mg of THC
2. Requirements for child-resistant packaging for edible retail marijuana products
3. Requirements for physically demarking multiple-serving edible retail marijuana products to show individual serving sizes
4. Incentives for the production of single-serving edible retail marijuana products

Below is a summary of the rule changes; the full text of the rules is attached in Appendix D.



**Rule R 103:**

Definitions added:

1. Liquid Edible Retail Marijuana Product
2. Multiple-Serving Edible Retail Marijuana Product
3. Single-Serving Edible Retail Marijuana Product
4. Standardized Serving of Marijuana

**Rule R 604:**

1. Establishes the Standardized Serving of Marijuana as no more than 10mg of active THC.
2. Requires the Edible Retail Marijuana Product Manufacturer to create standard operating procedures for each edible that it manufactures, including determination of the serving size of THC for each product and the number of servings in each product.
3. Requires the manufacturer to physically demark each serving of marijuana in edible products that exceed 10mg of active THC.
4. If demarcation is not possible, then the product must contain 10mg or less of active THC.

**Rules R 1004/1004.5:**

1. Rule R 1004.5 replaced Rule R 1004 on February 1, 2015.
2. Rule R 1004.5 shifts the responsibility for packaging and labeling of Edible Retail Marijuana Products to the manufacturer.
3. If a Single-Serving edible, then packaging must be Child Resistant for one opening. If a Multiple-Serving edible, then the packaging must be Child Resistant for multiple openings.

**Rules R 1006/1006.5:**

1. Rule R 1006.5 replaced Rule R 1006 on February 1, 2015.
2. Makes it a violation for a Retail Marijuana Store to purchase, take possession of, or sell non-compliant Edible Retail Marijuana Products.

**Rule 1503:**

1. Provides for process validation of Single-Serving Edible Retail Marijuana Products, as opposed to mandatory potency/homogeneity testing of every production batch, which is still required for products that exceed 10 mg of active THC.

## House Bill 14-1366 Work Group Process

The HB 14-1366 Work Group held four meetings between August 1, 2014 and November 17, 2014, and submitted 16 recommendations that were considered and discussed by the group in the course of its meetings. Further details on the schedule of meetings and key actions taken by the Work Group are included in Appendix C. Documentation of the meetings, including the stakeholder recommendations, is available at <https://www.colorado.gov/pacific/enforcement/MEDrulemaking>.

In its first meeting, the MED Guiding Principles for Rule-Making were presented to the group for use when considering and drafting recommendations, in order to encourage that recommendations emanating from this group be Defensible, Operable, Transparent, and Systematic, both to regulators and licensees.

Group members submitted their recommendations using a template provided by the MED (see Appendix E). The template requested the following:

- A description of the recommendation
- The rationale for proposing it and what issues it is expected to resolve
- Which elements of HB 14-1366 the recommendation addresses
- Which of the MED's Guiding Principles for Rule-making the recommendation addresses
- Any statutory authority or regulation supporting the regulation
- The stakeholders affected
- Whether there were any dissenting views
- Information on decisions and actions
- Information on time and cost to implement the recommendation

These are the five elements of HB 14-1366 that Work Group members were asked to address in their recommendations:

Elements of House Bill 14-1366 to which the Recommendation Applies	
a.	Protect people from the unintentional ingestion of edible retail marijuana products.
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.
c.	Makes it clear that the product is not for consumption by children.
d.	Makes it clear that the product is safe for consumers.
e.	Utilize a universal symbol.

The 16 recommendations were considered and discussed by the working group in its last two meetings and group members were given the option to revise and re-submit their recommendations based on the feedback received. Because dissenting views were frequently aired in the Work Group meetings, the chairs of the working group did not move to have the group vote on each recommendation. Rather, group members were strongly encouraged to submit written comments in favor of or opposing the recommendations by the December 1, 2014 final deadline, in order to have these comments considered and included in this report. Sixteen sets of comments were submitted by group members.

After considering the early work done by the group to identify categories of marijuana edible products and modalities for making them clearly identifiable as containing marijuana, the recommendations are presented below, sorted into four strategic options for the Colorado General Assembly and the State Licensing Authority to consider for clearly identifying edible marijuana products.

Also presented are additional recommendations that may fall outside the scope of HB 14-1366, but be of interest to the General Assembly for its further consideration and follow-up. Whenever there was a supporting or dissenting comment to a given recommendation, it is presented alongside the recommendation, for further discussion and investigation by the General Assembly.

At each meeting of the working group, members of the public were allowed to comment on the discussions, as well as to submit written comments to the MED by December 1, 2014. These public comments are also summarized below.

## **Presentations to the Work Group**

Four presentations were made to the Work Group to provide information that might be useful in their discussions and when making recommendations. The presentations are summarized below.

### ***Symbols, Safe Storage, Childproof Packaging, and Labeling***

The CDPHE presented information in the second Work Group meeting on using symbols to prevent unintentional injuries. Key strategies related to the use of symbols include identifying the target audience, such as parents or young children, and the call to action, or what the agency hopes to achieve through the use of the symbol. Also important are using truthful symbols and symbols that are easily taught and understood, and avoiding confused messages

through the use of indistinguishable symbols/shapes or symbols/shapes that are also used for other purposes.

The CDPHE representative confirmed that safe storage by adults has been shown to be the most effective means of preventing unintentional ingestion of harmful substances by children, but that multiple layers of storage such as child-resistant packaging are also important. The representative from Children's Hospital Colorado confirmed that unintentional ingestions are less likely to occur when the items remain in their original packaging, and that lowering the available amount of a drug within a container helps to prevent ingestion of a toxic dose. At the request of the group, CDPHE presented the following key findings about the impact of safe storage, childproof packaging, and labeling on preventing unintentional ingestions of harmful products by children, based on a review of the available literature:

- Storing products safely in the home where children cannot access them is one of the most effective strategies to prevent unintentional poisonings. Between 65% and 75% of childhood poisonings occur when the products are not safely stored.
- If the child is able to access the product, child-resistant packaging reduces the likelihood of ingestion, and therefore of childhood poisonings, by 35-45%.
- Labeling alone is insufficient to prevent unintentional poisoning, and young children often do not recognize products as dangerous from the packaging alone.
- Education on safe storage or preventing injuries can be an effective strategy to increase compliance with safely storing dangerous products in the home.
- Reducing barriers to safety equipment (such as providing free lock boxes to families) can help further increase compliance with safely storing dangerous products in the home.
- The most common age for unintentional poisonings in children from either medications or marijuana is around 2 years old, although preliminary data from childhood unintentional ingestions of marijuana in 2014 were among 3-7 year olds.

Based on this research, CDPHE planned to incorporate safe storage education and other items into its media campaigns related to marijuana use in Colorado, due to begin in January 2015, and to provide information to pediatric health care providers about recommending safe storage practices and providing educational resources for parents.

### ***Marijuana Industry Perspective on HB 14-1366***

At the Work Group's third meeting, a representative of the Colorado Cannabis Chamber of Commerce presented the marijuana industry's perspective when interpreting the mandate of HB 14-1366. He asserted that edible marijuana products are included in Amendment 64, Section 16 (2)(k), and as such, it would be unconstitutional to ban them. He pointed out that Section 5 (a) of Amendment 64 indicates that the regulations to be promulgated shall not

prohibit the operation of marijuana establishments, either expressly or through regulations that make their application unreasonably impracticable.

He reminded the group that HB 14-1366 tasked the State Licensing Authority to promulgate rules requiring that edible retail marijuana products be clearly identifiable, when practicable, with a standard symbol indicating that they contain marijuana. However, he pointed out that the legislation did not expressly state that the universal symbol must be affixed to the product itself, nor that the product must be distinguishable as a marijuana product outside its packaging, nor that the rules must limit the type of products available in the marketplace.

He argued that, driving the discussions regarding rendering marijuana products identifiable are a number of false beliefs - that accidental ingestions for children have increased, that confections are primarily consumed by children, that people are storing marijuana products irresponsibly, and that they are offering marijuana products to others without their knowledge.

He presented data on the most common sources of accidental ingestions, all of which are common household items not protected by childproof packaging. Although the number of cases of children ingesting marijuana has increased in Colorado, he argued that this increase is small relative to the huge proliferation of edible marijuana products in the Colorado market during the same period. Finally, he presented data to demonstrate that adults are the primary consumers of confections, and asserted that people are not secretly passing out edible marijuana products to friends at parties, nor are they distributing them to children.

### ***Unintentional Ingestion of Marijuana Products by Children***

Also during the third Work Group meeting, the representative from Children's Hospital Colorado presented data and information the Work Group about the incidence of unintentional ingestion of marijuana by children in Colorado. Appendix F summarizes the results of research he submitted to the group, indicating that calls to the regional poison center in Colorado related to pediatric marijuana exposure started to rise in 2010 with the development of the medical marijuana industry, and rose again sharply in 2013 with the introduction of retail marijuana, whereas the same type of calls nationally showed only a modest increase.

The number of calls to Colorado's regional poison center increased nearly fourfold from 2001 to 2013, with 7 calls in 2001 compared to 26 in 2013. There was a total of 119 exposure calls in the study period, with 79% of exposures (94 cases) having taken place in the child's home, 76% (90 children) seen or referred to a health care facility, 23% (27 children) admitted, and 16% (19 children) showing major or moderate effects and no deaths. The study concluded that the overall rate of regional poison center calls in Colorado remained low, but the rate was higher than for the rest of the United States.

The number of children approaching the emergency department at Children's Hospital Colorado for accidental ingestion of marijuana also increased starting in 2013 with the introduction of retail marijuana in Colorado, with eight children having approached the hospital in 2013 and 14 children having approached from January through October 2014. However, unintentional ingestions of marijuana remain low relative to ingestions of other toxic items.

The Children's Hospital representative noted that physicians are greatly aided in treating children for accidental ingestion when they have access to product information, either from seeing it on the product itself if any of the product information remains unconsumed, or having access to the product's packaging and labeling. However, these items are very often separated from their packaging at the time of ingestion, and thus difficult to identify.

### ***Intent of the Principal Sponsors of HB 14-1366***

Also during the third Work Group meeting, State Representative Frank McNulty and State Senator Mike Johnston gave a presentation regarding the history of HB 14-1366, and presented a letter from themselves and State Representative Jonathan Singer, who were the principal sponsors of the bill. The letter is included in Appendix G.

Representative McNulty and Senator Johnston explained that the impetus for introducing HB 14-1366 was to protect children from accidentally ingesting edible marijuana products, given the increase in the number of children approaching emergency rooms in Colorado for this purpose and the large number of products appearing in marijuana establishments that look like candies and other items that are attractive to children. The bill was introduced to deal with this public health concern, by giving parents a tool to help children recognize and avoid these products, and giving school resource officers a means of identifying these products when found in the possession of school children, even when the products are found outside their packaging. It was also introduced to protect against the additional public health concern of adults unintentionally ingesting edible marijuana products, which has resulted in deaths in Colorado, by giving them a means of knowing what they are ingesting even when these items are found outside their packaging.

The Legislators noted that during the legislative process, given the difficulty of being able to render beverages identifiable as containing marijuana outside their packaging, the words "when practicable" were added to qualify the statement in the bill regarding identifying edible marijuana products. They confirmed that in using the term "practicable" they meant possible to be put into practice, and that increased cost or the necessity of putting new technology into place would not make a method of identifying marijuana products "impracticable." On the contrary, the Legislators noted that if the marijuana industry

continues to make products that are attractive to children, they have a responsibility to take steps and incur costs to protect against children ingesting these products.

## Categorization of Edible Marijuana Products

In its first meeting, the group identified the following nine categories of marijuana edible products to be considered when determining potential methods of identifying these products as containing marijuana: Baked Goods, Bulk Foods, Chocolate, Hard Candy, Liquids, Mixes and Effervescent, Pills, Soft Candy, and Tinctures.

The group also generated an extensive list of marijuana edible products already on the market that fall within these categories (see Appendix H), from which a list of sub-categories of edible marijuana products was generated to assist the group in identifying modalities for clearly identifying that these products contain marijuana. These categories are listed in Table 1.

Table 1: Categories of Edible Marijuana Products				
<b>1. BAKED GOODS</b> <ul style="list-style-type: none"> <li>– Brownies</li> <li>– Cookies</li> <li>– Cakes</li> <li>– Granola bars</li> <li>– Breads</li> </ul>	<b>2. BULK FOODS</b> <ul style="list-style-type: none"> <li>– Loose granola</li> <li>– Crackers</li> <li>– Popcorn</li> <li>– Baking mixes</li> <li>– Trail mix</li> <li>– Nuts</li> <li>– Potato Chips</li> </ul>	<b>3. CHOCOLATE</b> <ul style="list-style-type: none"> <li>– Bars</li> <li>– Truffles</li> <li>– Candy-coated</li> <li>– Drop chocolate</li> </ul>	<b>4. HARD CANDY</b> <ul style="list-style-type: none"> <li>– Mints</li> <li>– Suckers</li> <li>– Throat Lozenges</li> </ul>	<b>5. LIQUIDS</b> <ul style="list-style-type: none"> <li>– Soft Drinks</li> <li>– Coffee</li> <li>– Tea</li> <li>– Cooking Oils</li> <li>– Dressings</li> <li>– Sauces</li> <li>– Honey</li> <li>– Agave Nectar</li> </ul>
<b>6. MIXES &amp; EFFERVESCENTS</b> <ul style="list-style-type: none"> <li>– Oral Dissolvables</li> <li>– Powdered Beverages</li> <li>– Powdered Candy</li> <li>– Powdered foods</li> </ul>	<b>7. PILLS</b> <ul style="list-style-type: none"> <li>– Pressed Pills</li> <li>– Capsules</li> </ul>	<b>8. SOFT CANDY</b> <ul style="list-style-type: none"> <li>– Gummies</li> <li>– Chewing gum</li> <li>– Taffy</li> <li>– Chocolate chews</li> <li>– Fruit Chews</li> <li>– Licorice</li> </ul>	<b>9. TINCTURES</b> <ul style="list-style-type: none"> <li>– N/A</li> </ul>	

## Modalities for Identifying Edible Marijuana Products

### *Five Modalities for Identifying Edible Marijuana Products*

The group then moved on to consider the possible modalities for making edible marijuana products clearly identifiable, and came up with five modalities: Marking, Shape, Color, Smell, and Packaging and Labeling. The first four modalities involve making the product itself identifiable as containing marijuana when outside its packaging, whereas the fifth focused on the exterior packaging and labeling of the product without any alteration of the product itself.

#### **Modalities for Clearly Identifying Edible Marijuana Products**

1. Marking
2. Shape
3. Color
4. Smell
5. Packaging and Labeling

### *Debate Over Legislative Intent*

Although the legislative declaration of HB 14-1366 states that it is the Intent of the General Assembly to “Ensure that edible retail marijuana products are readily identifiable by the public,” the language of the bill is silent on two important points: (1) whether an edible product must be identifiable outside its packaging; and (2) what should be done regarding those edible marijuana products that cannot be made readily identifiable outside their packaging.

Given this lack of clarity, there was considerable disagreement in the Work Group regarding the legislative intent of HB 14-1366 in regard to these two points. Some group members argued that it was not the intent of HB 14-1366 to identify edible marijuana products by their packaging and labeling, since HB 13-1317, codified in §12-43.4-202, C.R.S., had already addressed this issue, and that the intent was rather that these products themselves should be clearly identifiable as containing marijuana even when outside their packaging. The principal



sponsors of HB 14-1366 confirmed in their presentation to the Work Group and in a letter addressed to the group that their intent in drafting the bill was “that the products themselves, and not the products’ packaging, bear the symbol mandated in the bill” (see Appendix G).

Other group members felt that focusing on external packaging and labeling was sufficient to meet the requirements of HB 14-1366, since the bill did not specifically mention that the products should be identifiable when outside their packaging, nor did it exclude packaging and labeling from consideration as means of identifying these products.

This disagreement over the legislative intent of HB 14-1366 led to a wide range of recommendations from the Work Group about how to identify products, whether outside the packaging or only through packaging and labeling, and about what should be done when products cannot be identified outside their packaging. As such, it would be helpful for the General Assembly to clarify its intent related to these two important points.

### ***Strategies within Each Modality***

Despite this disagreement over the legislative intent, the group identified numerous potential strategies within each modality, summarized in Table 2. Under Marking, the group additionally discussed several ideas for a universal symbol as indicated in HB 14-1366. These included using the letters “THC”, a marijuana leaf, a stop sign, and a “Yuck Face,” the latter of which has been used to prevent accidental ingestion of poisonous substances.

<b>Table 2: Strategies for Making Marijuana Products Clearly Identifiable</b>				
<b>1. MARKING</b> <ul style="list-style-type: none"> <li>– Stamping</li> <li>– Stenciling</li> <li>– Molded piece</li> <li>– Scoring</li> <li>– Branding</li> <li>– Frosting</li> </ul> <b>IDEAS FOR MARKING BY A UNIVERSAL SYMBOL</b> <ul style="list-style-type: none"> <li>– THC</li> <li>– Leaf</li> <li>– Stop sign</li> <li>– Yield Sign</li> <li>– “Yuck Face”</li> </ul>	<b>2. SHAPE</b> <ul style="list-style-type: none"> <li>– Marijuana leaf</li> <li>– Stop sign</li> <li>– Molded piece</li> </ul>	<b>3. COLOR</b> <ul style="list-style-type: none"> <li>– Black/gray</li> <li>– Green</li> </ul>	<b>4. SMELL</b> <ul style="list-style-type: none"> <li>– Sulfur</li> <li>– Marijuana</li> </ul>	<b>5. PACKAGING &amp; LABELING</b> <ul style="list-style-type: none"> <li>– Better universal symbol, avoid small type</li> <li>– Consumer advisory: e.g. restaurant menus</li> <li>– “Yuck face”</li> <li>– Encourage people to keep product in packaging until consumption</li> </ul>

Finally, the group went through a systematic exercise to map out which of the modalities could be matched with the various types of marijuana edible products, while at the same time considering which of these pairings would also meet the MED's rule-making criteria of being Defensible, Operable, Transparent, and Systematic.

A chart showing the results of this exercise is included in Appendix I, with X's indicating consensus decisions regarding which modalities could be applied to the various types of edible marijuana products.

The group could universally agree that chocolate, hard candies, and pills could all be identified by marking (stamping, stenciling or scoring) as well as by shape, and that soft candies could be identified by shape. They were also in agreement that all types of edible marijuana products could be identified through packaging and labeling, although there was disagreement in the group as to whether it had been charged simply to augment the existing and extensive packaging and labeling requirements, or rather to recommend ways to identify marijuana edible products outside their packaging.

### **Edible Marijuana Products Identifiable By:**

- |                                |  |
|--------------------------------|--|
| <b>Marking or Shape:</b>       | <ul style="list-style-type: none"> <li>• Chocolate</li> <li>• Hard Candies</li> <li>• Pills</li> </ul> |
| <b>Shape:</b>                  | <ul style="list-style-type: none"> <li>• Soft Candies</li> </ul>                                       |
| <b>Packaging and Labeling:</b> | <ul style="list-style-type: none"> <li>• All edible marijuana products</li> </ul>                      |

### ***Debate over “Practicable”***

Another area of disagreement in the Work Group, related to the challenge of identifying edible marijuana products outside their packaging, was over the definition and intent of the term “practicable.” This term was used in HB 14-1366 as a qualifier to the requirement that edible products should be identifiable with a standard symbol indicating that they contain marijuana, but the term was not defined in the bill. See §12-43.4-202(3)(c.5)(I).

Some Work Group members suggested that because the term “practicable” is not defined in HB 14-1366, nor in the Colorado Retail Marijuana Code, a common dictionary definition should be used, namely “possible to perform” or “capable of being done.” As such, they asserted that whenever it is possible to apply a symbol to an edible marijuana product, manufacturers must be required to do so.

Other Work Group members understood “practicable” in HB 14-1366 to mean the opposite of “unreasonably impracticable,” which was defined as follows in Amendment 64 to include cost

and other considerations: “that the measures necessary to comply with the regulations require such a high investment of risk, money, time, or any other resource or asset that the operation of a marijuana establishment is not worthy of being carried out in practice by a reasonably prudent businessperson.” See Colorado Constitution, Article 18 §16(2)(o). This group argued that, even when possible, many of the methods for marking products would involve extensive efforts to reorganize current manufacturing processes, as well as excessive costs to the manufacturers, making them impracticable.

These different understandings of the meaning of “practicable” led to different recommendations about which products can and should be marked, shaped, or colored, and what should be done when products cannot be marked, shaped, or colored. Some thought that products should be banned in this case, while others thought that it would be sufficient to simply identify the products through their packaging and labeling and increase awareness through consumer education. As such, it would be helpful for the General Assembly to clearly define “practicable” in HB 14-1366 and for the forthcoming rule-making process mandated under the bill.

## Four Strategic Options for Rendering Edible Marijuana Products Identifiable

The HB 14-1366 Work Group submitted a total of 16 recommendations, using the template provided (see Appendix E for the recommendation template), many of which contained multiple sub-recommendations. Due to their similarity, two recommendations were combined in this report, such that a total of 15 recommendations are presented, containing a total of 44 sub-recommendations.

The recommendations included options for clearly identifying edible marijuana products, as well as improvements in several other areas that may fall outside the scope of HB 14-1366, but be of interest to the General Assembly and the State Licensing Authority for their consideration and follow up.

The recommendations related to identifying marijuana edible products fall into four strategic options, ranging from the least to the most restrictive:

1. Take no action at this time to identify edible marijuana products, allowing time to determine if the rules effective October 30, 2014 are sufficient for the public to identify these products and prevent unintentional ingestion.
2. Strengthen packaging and labeling requirements for edible marijuana products.
3. Identify edible marijuana products outside their packaging by marking, shaping or coloring all products that can be readily marked, shaped, or colored.

4. Limit or ban categories of edible marijuana products or particular edible marijuana products if they cannot be rendered clearly identifiable outside their packaging by marking, shaping, or coloring.

### **Strategic Options for Rendering Edible Marijuana Products Identifiable**

1. *Take no action at this time to identify edible marijuana products*
2. *Strengthen packaging and labeling requirements*
3. *Identify edible marijuana products outside their packaging*
4. *Limit or ban categories of edible marijuana products or particular products*

Following is a list of the recommendations and sub-recommendations falling within each of these strategic options. Detailed information about the recommendations, supporting comments, and dissenting comments is presented below, and a summary table of all sub-recommendations under each strategic option is presented in Appendix Q.

#### **1. Take No Action at this Time to Identify Edible Marijuana Products**

<b>No.</b>	<b>Name of Recommendation</b>
7.1	Take No Action at this Time, Labeling, and Consumer Education

#### **2. Strengthen Packaging and Labeling Requirements**

<b>No.</b>	<b>Name of Recommendation</b>
1.2	Imprinting Some Categories of Edible Marijuana Products and Labeling Others
5.1	Labeling to Require that Edible Marijuana Products Stay Within their Original Packaging
6.1-6.3	Universal Symbol, Labeling, and Consumer Education
7.2	Take No Action at this Time, Labeling, and Consumer Education
9.1-9.4	Universal Symbol, Labeling, Data Collection, and Consumer Education
11.1	Labeling, Universal Symbol, and Data Collection
14.1-4.3	Symbol, Packaging and Labeling, Identifying Outside Packaging, Product Safety, Product Advisory Commission, and Education
16.1-16.2	Packaging and Labeling, Marking Products, Limiting Products, Data Analysis, and Education

It should be noted that the labeling requirements contained in statute for retail marijuana products are extensive and detailed, such that adding more requirements in rule may make it more difficult for consumers to extract the most important public safety information. See §12-43.4-202(3)(a)(VII)(A-o) and §24-4-1614(3)(a), C.R.S. Along with the recommendations proposed in this report related to rulemaking for labeling, the Work Group had extensive discussion about the need to simplify the labeling requirements currently in statute. The Work Group also discussed whether there was a need for the State Licensing Authority to have greater ability to address labeling requirements in rule, in order to respond more quickly to evolving needs.

### ***3. Identify Edible Marijuana Products Outside their Packaging***

<b>No.</b>	<b>Name of Recommendation</b>
1.1	Imprinting Some Categories of Edible Marijuana Products and Labeling Others
3.1-3.4	Marking Categories of Edible Marijuana Products and Methods for Marking Them
4.1	Marking Edible Marijuana Products Directly Whenever Possible
14.3(a)	Symbol, Packaging and Labeling, Identifying Outside Packaging, Product Safety, Product Advisory Commission, and Education
15.1, 15.3	Imprinting Edible Marijuana Products with a Universal Symbol or Color and Prohibiting Products that Cannot be Imprinted or Colored
16.3	Packaging and Labeling, Marking Products, Limiting Products, Data Analysis, and Education

### ***4. Limit or Ban Categories of Edible Marijuana Products or Particular Products***

<b>No.</b>	<b>Name of Recommendation</b>
10.1-10.2	Limit Edible Marijuana Products to Lozenges and Tinctures
14.4	Symbol, Packaging and Labeling, Identifying Outside Packaging, Product Safety, Product Advisory Commission, and Education
15.2	Imprinting Edible Marijuana Products with a Universal Symbol or Color and Prohibiting Products that Cannot be Imprinted or Colored
16.4	Packaging and Labeling, Marking Products, Limiting Products, Data Analysis, and Education

Some Work Group members objected to recommendations to ban certain categories of edible products, or particular products before they are marketed, claiming that these recommendations were not in alignment with Amendment 64 of the Colorado Constitution, which allows for the legal sale of edible marijuana products.

Others argued that, while the Amendment allows for the sale of these products generally, it should not be interpreted to mean that any and all edible marijuana products should be

allowed. Rather, they asserted that public health and safety concerns must take precedence over the business interests of edible marijuana manufacturers and do warrant some limits being placed on which types of products can be produced and marketed. Of particular concern was the risk of accidental ingestion by children of edible marijuana products that look very similar to products not containing marijuana that are attractive to children, such as candies and baked goods.

## Additional Recommendation Categories

Additional recommendations that may fall outside the scope of HB 14-1366 but be of interest to the General Assembly and the State Licensing Authority fall into the following three broad categories:

5. Increase the level of consumer education about the proper uses of and dangers related to edible marijuana products.
6. Improve data collection and analysis related to edible marijuana product use, misuse, and accidental use.
7. Other recommendations related to the use of licensed marijuana testing facilities and ensuring product safety.

### Additional Recommendation Categories

5. *Increase Consumer Education*
6. *Improve Data Collection and Analysis*
7. *Other –Testing Facilities and Product Safety*

Following is a list of recommendations and sub-recommendations falling into each of these categories. Detailed information about the recommendations, supporting comments, and dissenting comments is presented below, and a summary table of all sub-recommendations in each category is presented in Appendix Q.

### 5. Increase Consumer Education

No.	Name of Recommendation
2.1	Consumer Education Campaigns
6.4	Universal Symbol, Labeling, and Consumer Education
7.2	Take No Action at this Time, Labeling, and Consumer Education
9.6	Universal Symbol, Labeling, Data Collection, and Consumer Education
14.5	Symbol, Packaging and Labeling, Identifying Outside Packaging, Product Safety, Product Advisory Commission, and Education
16.5	Packaging and Labeling, Marking Products, Limiting Products, Data Analysis, and Education

### 6. Improve Data Collection and Analysis

No.	Name of Recommendation
9.5	Universal Symbol, Labeling, Data Collection, and Consumer Education
11.2	Labeling, Universal Symbol, and Data Collection
12.1-12.3	Data Collection and Analysis
16.6	Packaging and Labeling, Marking Products, Limiting Products, Data Analysis, and Education

### 7. Other –Testing Facilities and Product Safety

No.	Name of Recommendation
13.1	Allow Non-Licensees to Use Marijuana Testing Facilities
14.3(c)	Symbol, Packaging and Labeling, Identifying Outside Packaging, Product Safety, Product Advisory Commission, and Education

## Recommendations of the HB 14-1366 Work Group

Following is a presentation of the 15 recommendations and 44 sub-recommendations submitted by Work Group members for the consideration of the General Assembly and the State Licensing Authority. All recommendations represent the views and positions of the Work Group members and organizations that submitted them. The recommendations do not represent the opinion of the entire Work Group, nor of the MED or the Department of Revenue. Full text versions of the recommendations submitted by the Work Group members are available at <https://www.colorado.gov/pacific/enforcement/MEDrulemaking>.

Summaries of the supporting and dissenting comments from other Work Group members are presented following each recommendations, and allow for an assessment of the level of agreement or disagreement found among the Work Group members for a given recommendation.

Following the presentation of each recommendation is a listing of the identified categories into which the recommendation falls, which includes the four strategic options for rendering edible marijuana products identifiable and the three other additional categories outlined above.

Also presented is a list of the elements of HB 14-1366 to which the recommendation applies:

<b>Elements of House Bill 14-1366 to which the Recommendation Applies</b>	
a.	Protect people from the unintentional ingestion of edible retail marijuana products.
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.
c.	Makes it clear that the product is not for consumption by children.
d.	Makes it clear that the product is safe for consumers.
e.	Utilize a universal symbol.

After each recommendation is a presentation of the MED Guiding Principles for Rule-Making as applied and articulated by the drafter of the recommendation, showing how the recommendation was thought to be Defensible, Operable, Transparent, and Systematic. It should be noted that the Work Group members did not always apply all four Guiding Principles in their recommendations. As such, missing Guiding Principles in the charts below do not necessarily imply that the Principle is inapplicable to the recommendation, but rather that it was not considered and presented by the drafter.

After the presentation of the Guiding Principles, the rationale for the recommendation is outlined. It is important to point out that the drafters of the recommendations presented data and made claims in support of their recommendations, some of which are backed up by scientific research and cited, and others that are anecdotal and difficult to verify. These claims and anecdotal information represent the views of the Work Group members who presented them, and not of the entire Work Group, the MED, or the Department of Revenue.

Following the presentation of the rationale are a discussion of the statutory authorities or regulations supporting the recommendation, a consideration of the stakeholders likely to be affected by the recommendation if it were implemented, and the authorities that would be responsible for implementing the recommendation.



## No. 1 - Imprinting Some Categories of Edible Marijuana Products and Labeling Others

Presented By: Children's Hospital Colorado

- 1.1 All pills, chocolate, hard candy, and soft candy that contain marijuana should be imprinted with the agreed-upon, universal symbol.
- 1.2 Marijuana edible products that cannot feasibly be individually imprinted should be packaged and labeled in a way that:
  - a. Clearly displays the agreed-upon, universal symbol; and
  - b. Includes clear warning statements such as "Keep out of the reach of children," "Harmful if ingested by children," "For adult use only," "Do not operate motor vehicles or heavy equipment if taken," and "Keep in original packaging until consumed."

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
2.	Strengthen Packaging and Labeling Requirements	✓
3.	Identify Edible Marijuana Products Outside their Packaging	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making		
Operable	The recommendation is operable because it includes imprinting for those edible marijuana products that can be imprinted (pills, chocolate, hard candies, and soft candies), but reduces the requirement to appropriate packaging and labeling for those products that cannot be imprinted (baked goods, bulk foods, mixes/effervescent products, liquids, and tinctures).	✓

### **Rationale for the Recommendation and Issues it is Expected to Resolve**

Experience with unintentional ingestions in children has shown that the ability to rapidly identify the suspected agent can be very helpful in providing appropriate care and avoiding unnecessary tests. This identification is often done through the imprinting on pills and other medicines.

The use of labeling such as “harmful if ingested by children”, and “Keep out of the reach of children” comes from the toxic chemical industry and has been shown to be effective in helping parents know to place certain chemicals in areas that are hard to reach by children.

The recommendations are intended to address the problem that edible marijuana products are difficult to distinguish from non-marijuana foods that otherwise look identical.

### **Statutory Authority or Regulation Supporting the Regulation**

Authority for labeling of marijuana products is contained in Article XVIII, Subsection 16(5)(a)(VI) of the Colorado Constitution. Further statutory authority for warning labels on marijuana products can be found in §12-43.4-202(3)(a)(VII), C.R.S. Additionally, MED 1 CCR 212-2, Series R 1000 – Labeling, Packaging, and Product Safety, includes requirements related to warning labels for retail marijuana product containers and other labeling rules that align with the current recommendation to promote public health and safety.

### **Stakeholders Affected**

Children and families will benefit by being able to identify edible marijuana products that contain marijuana. Consumers will be better educated about how to use and store edible marijuana products to avoid harm to themselves and children who might unintentionally ingest them.

### **Implementing Authorities**

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment

Supporting Comments from Work Group Members	
1.	1.1: Public and consumer safety should be the number one priority of marijuana manufacturers, retailers, testing facilities, advocacy groups, regulators, the MED, and lawmakers. Marking edible marijuana products promotes public and consumer safety. A set of methods for marking edible marijuana products is described in Appendix N, based on the advice of a food product development expert with 44 years of experience in the food industry, where customer safety is a primary consideration. All methods are capable of being done and will be effective for applying a symbol to edible marijuana products, while the costs to manufacturers are not overly burdensome. Edible marijuana products currently on the market are already being marked using these methods.
2.	1.1: The representative from Children's Hospital Colorado in his presentation to the Work Group noted that marking edible marijuana products is not likely to prevent accidental ingestions in young children, although it would help health care providers to better care for children who approach hospitals after having accidentally ingested these products. Because accidental ingestions in children will not likely be prevented by marking products, the focus should instead be on educating parents and other caregivers that they should be forthcoming about providing health care providers information what the child ingested. Also, if the product was produced by a licensed marijuana manufacturer, the package will contain full information about the product and can be provided to health care providers in these situations.
3.	1.1: One instance of support was registered without comment for sub-recommendation 1.1 regarding marking the listed categories of edible marijuana products.
4.	1.2: The labels on edible marijuana products need to be reevaluated. There are several pieces of information that do not add value to the label and should be removed, because they detract from the most important information that needs to stand out. A few things need to be added, including an updated universal symbol and a graphic symbol showing or telling consumers to store this product in its original packaging out of the sight and reach of children.
5.	1.2 (a) One instance of support without comment was registered for sub-recommendation 1.2(a) regarding displaying the universal symbol.
6.	1.2(b): One instance of support was registered with sub-recommendation 1.2(b) regarding warnings on labels, with the reservation that the amount of verbiage that must already, by rule or law, be included on labeling has grown to the point where the most essential information is lost.
7.	1.2(b): More information should be on the label and revisions could be made, but some of the language suggested in sub-recommendation 1.2(b) is already required.

Dissenting Comments from Work Group Members	
1.	1.1: It may be difficult to ensure that a particular marking could be affixed to many hard and soft candies. In addition, the cost of marking items may be out of proportion to the potential public health gain, particularly if educational initiatives are pursued to encourage people to keep items within their original packaging and to be forthcoming with health care providers in the event of an accidental or unintentional over-ingestion.
2.	1.1: Imprinting pills, chocolates, and candies must be done with commercial-grade, NSF International-certified equipment, which costs at least \$100,000. Marijuana industry members do not have access to banking services and cannot obtain loans to allow them to purchase such machines. This recommendation is therefore cost-prohibitive and “impracticable” for manufacturers.
3.	1.1 The representative from Children’s Hospital Colorado in his presentation to the Work Group noted that marking edible marijuana products is not likely to prevent accidental ingestions in young children, although it would help health care providers to better care for children who approach hospitals after having accidentally ingested these products. Because these ingestions will not likely be prevented by marking products, the focus should instead be on educating parents and other caregivers that they should be forthcoming about providing health care providers information what the child ingested. Also, if the product was produced by a licensed marijuana manufacturer, the package will contain full information about the product and can be provided to health care providers in these situations.
4.	1.2(a): It is not likely that any universal symbol on an edible marijuana product will prevent a young child from ingesting it.

## No. 2 - Consumer Education Campaigns<sup>1</sup>

Presented By: Marijuana Licensee

**2.1 The Governor's Office of Marijuana Coordination and the Colorado Department of Public Health and Environment, using funds from the Marijuana Tax Fund, should coordinate the following educational campaigns:**

- a. A "Start Low, Go Slow" campaign advising new consumers to initially use considerably less than a single 10-mg dose of THC and to wait at least two hours before further ingestion, to reduce accidental over-ingestion by adults.**
- b. An adult education campaign that would (1) advise consumers to keep marijuana products out of the sight and reach of children and store them in their original, child-proof packaging; (2) urge honesty with health care providers about the products consumed in the event of accidental ingestion by a child; and (3) give parents tools for open, honest conversations with their children about alcohol, marijuana and illegal drugs.**
- c. A campaign to remind the public that purchases of marijuana products from any source other than a licensed store is illegal, and that black market products do not offer quality control, safety testing, informational labels, or child proof packaging. This campaign could be connected to the "Drive High, Get a DUI" campaign and coordinated with high-profile law enforcement actions against black market providers operating through public venues such as Craigslist.**

Recommendation Categories		
Other Types of Recommendation		
5.	Increase Consumer Education	✓

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<sup>1</sup>CDPHE's "Good to Know" campaign and website (<http://www.goodtoknowcolorado.com>) were launched early in 2015, after the HB 14-1366 Work Group concluded its work. The campaign is targeted to adults and visitors to Colorado and relays basic information about Colorado's marijuana laws.

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓

a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
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Application of MED Guiding Principles for Rule-Making
The Guiding Principles were not applied in the formulation of this recommendation.

Application of MED Guiding Principles for Rule-Making
The Guiding Principles were not applied in the formulation of this recommendation.

### Rationale for the Recommendation and Issues it is Expected to Resolve

Stakeholders in the working group have identified a number of concerns regarding edible products, primarily (1) accidental ingestion by children, (2) accidental over-ingestion by adults, (3) parents not knowing what their children are consuming and (4) the heightened risks posed by black market edible products. This recommendation is proposed to address all of these concerns through the further education of consumers, parents and young adults.

The MED and licensees have already taken important initial steps in addressing accidental ingestion and over-ingestion through childproof packaging and limiting serving sizes to 10-mg of THC. The current recommendation builds on these actions by adding an education drive to encourage safe handling and consumption, and discourage purchases on the black market.

Marijuana licensees have additionally begun a number of voluntary, coordinated education campaigns, which include advising a “Start Low, Go Slow” approach to the consumption of edible marijuana products. Reinforcement of this message by the State would strengthen these efforts.

It has been emphasized in the working group meetings that the most effective methods for preventing ingestion of marijuana by children is by preventing access, first by keeping the items out of their reach and second through child-proof packaging. It is the responsibility of the purchasers and consumers of edible marijuana products to ensure safe storage.

In the event of accidental ingestion by a child, it is imperative that adults speak openly with healthcare providers about what the child ingested, in order to avoid unnecessary, expensive and possibly hazardous testing.

Finally, parents should be encouraged to have conversations with their children to prevent use of alcohol, marijuana and illegal drugs; these conversations can be difficult, and parents can be provided with tools to guide them through the process.

### Statutory Authority or Regulation Supporting the Regulation

SB 14-215 created the Governor's Office of Marijuana Coordination to “coordinate the executive branch response to the legalization of retail marijuana as directed by the

Governor... [including] educational content planning and implementation.” See §24-38.3-101(2), C.R.S. The CDPHE has been allocated funds under SB 14-215 “to address the immediate educational needs of the public in response to the legalization of retail marijuana in the State.” See §25-3.5-1003(1), C.R.S. SB 14-215 directs the CDPHE to “provide information to (a) the general public regarding the law surrounding the legal use of retail marijuana... and (d) the general public regarding the dangers associated with the over-consumption of marijuana-infused products.” See §25-3.5-1004(1), C.R.S. The proposed educational campaigns fall squarely within the purview of these directives and allocations.

### Stakeholders Affected

The general public will benefit from the educational campaigns through reduction of accidental ingestion by children and over-ingestion by adults. The only “stakeholders” that would be negatively affected would persons producing and selling marijuana on the black market.

### Implementing Authorities

Governor’s Office of Marijuana Coordination, Colorado Department of Health and Environment

Supporting Comments from Work Group Members	
1.	One instance of support was registered without comment for this recommendation in its entirety.
2.	Education must be a cornerstone of any future regulations, to assist consumers to know how to use and store edible marijuana products in accordance with Colorado laws and regulations. This education must be simple and clear, focusing on the most important messages, including (1) that edible marijuana products are for the use of persons 21 and over, (2) that they must be stored safely and kept out of the reach of persons under 21, and (3) the consequences of breaking the laws and regulations.

Dissenting Comments from Work Group Members	
1.	This recommendation fails to satisfy the legislative mandate promulgated in HB 1366 and violates the General Assembly's intent behind enacting the bill. Rather than addressing the Work Group's charge of making recommendations for rules about how edible retail marijuana products can be made clearly identifiable to the general public, this recommendation focuses on education.
2.	This recommendation does not address the identification of edible marijuana products outside their packaging.

## No. 3 - Marking Categories of Edible Marijuana Products and Methods for Marking

Presented By: Smart Colorado

**3.1 All marijuana-infused edible products should be made “clearly identifiable” as containing marijuana. Following are general descriptions of how a standard symbol can be applied to baked goods, chocolate, hard candy, soft candy, bulk foods, liquids, and pills. Appendix J presents the list developed by this Work Group of edible products currently on the market, with a more detailed description, in Smart Colorado’s view, of how each can be made clearly identifiable as containing marijuana.**

**3.2 Baked Goods:** All marijuana-infused baked goods should be required to bear the standard symbol. Below are methods that can be used to apply the symbol to various types of baked goods.

**Brownies:** (1) Airbrushing the standard symbol on the brownie using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which brownie batter can be poured; (3) Use of a stencil or branding instrument to imprint the standard symbol on the brownie after it has been baked and before it hardens; or (4) Application of frosting in the shape of the standard symbol.

**Cookies:** (1) Airbrushing the standard symbol on the cookie using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which cookie batter can be poured; (3) Use of a stencil or branding instrument to imprint the standard symbol on the cookie after it has been baked and before it hardens; or (4) Application of frosting in the shape of the standard symbol.

**Cakes:** (1) Airbrushing the standard symbol on the cake using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which cake batter can be poured; or (3) Application of frosting in the shape of the standard symbol.

**Granola Bars:** (1) Airbrushing the standard symbol on the granola bar using a stencil and organic or nonorganic food coloring; or (2) Use of a stencil or branding instrument to imprint the standard symbol on the bar.

**Crackers:** Airbrushing the standard symbol on the crackers using a stencil and organic or nonorganic food coloring.

**Pastries:** Airbrushing the standard symbol on the pastries using a stencil and organic or nonorganic food coloring.

**Superfood:** (Go Chi Ball/Zoom Ball): Airbrushing the standard symbol on the balls using a stencil and organic or nonorganic food coloring.



**3.3 Chocolate, Hard Candy, Soft Candy:** All marijuana-infused chocolate, hard candy including lozenges, and soft candy including gummies should be required to be marked using one of the following methods: (1) Airbrushing the standard symbol on these products using a stencil and organic or nonorganic food coloring; (2) Use of a mold to imprint the standard symbol on these products; or (3) Use of a stencil or branding instrument to imprint the standard symbol on these products before they harden.

**3.4 Bulk Foods, Liquids, and Pills:** All edible marijuana bulk foods (e.g. nuts, popcorn, cereal, granola and trail mix), liquids (e.g. coffee, juice soft drinks, tea, sauces, and cooking oils), and pills should be symbolized with a standard color, which should be unique and unlike colors appearing in existing food products. Coloring bulk items and liquids can be achieved by application of organic or nonorganic food coloring in the standard color. For bulk foods, manufacturers can use an airbrush tool to apply the standard color.

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
3.	Identify Edible Marijuana Products Outside their Packaging	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Defensible</b>	The proposal leverages contemporary technology for applying a symbol to edible products. For example, manufacturers can symbolize the presence of marijuana in their products using a culinary airbrush system, a custom mold, a branding instrument, or a unique color.	✓
<b>Operable</b>	The recommendation provides practicable methods and a variety of options for manufacturers to apply the universal symbol that are not so onerous as to render the operation of a marijuana products manufacturing facility economically unsustainable. The marking requirements can be easily enforced by the MED through inspections of manufacturers' inventories to ensure that products bear the requisite symbol.	✓
<b>Transparent</b>	The recommendation clearly articulates which edible products must bear a symbol.	✓
<b>Systematic</b>	The recommendation clearly articulates which edible products must bear a symbol.	✓

### **Rationale for the Recommendation and Issues it is Expected to Resolve**

Attachment K shows side-by-side photographs of marijuana-infused and regular versions of two popular candies. The marijuana-infused candies and regular candies look identical, making it impossible for an adult or child to distinguish them and know which is safe to eat, or for a parent, teacher, or law enforcement officer to readily know which contains marijuana when found in the possession of children or youth. A major objective behind HB 14-1366 was to provide children, parents, grandparents, guardians, principals, teachers, school resource officers, law enforcement officers, and others the tools they need to determine when a food product contains marijuana, in order to protect public safety.

This recommendation aims to satisfy the requirement in HB 14-1366 that edible marijuana products be clearly identifiable, when practicable, with a standard symbol indicating that they contain marijuana. Webster's Third New Dictionary defines "practicable" as "possible to perform" or "capable of being done." Thus, if it is possible for manufacturers to apply a symbol to an edible product and if it can be done, HB 14-1366 indicates that it should be done.

Research into edible marijuana products currently on the market, as well as non-marijuana products that are similar to products currently being infused with marijuana, demonstrated that it is possible to apply an identifying symbol to baked goods, chocolates, hard candies, lozenges, soft candies, and gummies, and that it is possible to identify bulk foods, liquids, and pills using color.

Marijuana products manufacturers are already imprinting symbols and lettering on baked goods, chocolate, hard candies, lozenges, soft candies, and gummies, and are producing marijuana pills in a variety of colors. Appendix K provides examples of edible marijuana products already on the market with identifying symbols or colors. Moreover, countless non-marijuana products also bear a variety of logos and letterings, and are produced in a variety of colors. Appendix L provides examples of non-marijuana products that are similar to edible marijuana products and have identifying symbols or colors. These examples demonstrate that it is possible to apply identifying symbols or color to all categories of edible marijuana products.

This recommendation proposes a variety of methods for applying a symbol or color to each category of edible marijuana products, all of which are practicable because they are possible to perform and capable of being done. Moreover, research into the costs of applying the proposed marking requirements show that these costs are not so formidable as to render marijuana products operations economically unsustainable. For example, culinary airbrush systems are available for as little as \$69/unit, while custom molds can be obtained for approximately \$900 for a set of 10 molds with 12 cavities each and a total of 120 cavities.

Manufacturer's concerns about the cost and challenges of implementing the proposed marking requirements must be checked against these modest cost estimates, and cannot be allowed to override the public safety concerns that led to the enactment of HB 14-1366.

This recommendation addresses the U.S. Drug Enforcement Administration's concerns over edible marijuana products that cannot be distinguished from regular food products. It also responds to the suggestion presented in the U.S. Department of Justice's Cole Memo of August 2013 for aggressive regulatory systems in states like Colorado that have enacted laws authorizing marijuana-related conduct, to address the threats to public safety, public health, and other law enforcement interests that these states' laws could pose. Implementing strong and effective regulations to clearly identify edible marijuana products from non-marijuana products will reduce the likelihood of federal enforcement action in Colorado.

### **Statutory Authority or Regulation Supporting the Regulation**

The General Assembly, through HB 14-1366, specified its intent that "edible retail marijuana products be clearly identifiable, when practicable, with a standard symbol indicating that it contains marijuana and is not for consumption by children." See §12-43.4- 202(3)(C.5)(1), C.R.S.

"Practicable" is neither defined in HB 1366 nor any other place in Colorado's Retail Marijuana Code. When interpreting ambiguous statutory terms, it is imperative that common words be given their ordinary meanings. *People v. Vecellio*, 292 P.3d 1004, 1010 (Colo. App. 2012). When a statute does not define a term, but the term in question is of common usage, the dictionary definition may be used to determine the plain and ordinary meaning of that term. *Marks v. Koch*, 284 P.3d 118, 123 (Colo.App.2011); *People v. Connors*, 230 P.3d 1265, 1267 (Colo.App.2010).

"Practicable" is defined in Webster's Third New Dictionary as "possible to...perform; capable of being ...done." *Webster's Third New International Dictionary* 1780 (2012). This is the standard MED must use to determine whether applying a symbol to various edible products is "practicable," and therefore required under HB 14-1366. In essence, when it is possible, by any means, to apply a symbol to an edible product, manufacturers must do so.

On several occasions during HB 14-1366 Work Group meetings, it has been mistakenly suggested that the term "practicable," as it appears in HB 14-1366, and the term "unreasonably impracticable," as it appears in the state's constitution, share the same meaning. In actuality, these terms have different applications. HB 14-1366's "practicable" standard governs when MED must require manufacturers to mark their products with a symbol. The constitutional term "unreasonably impracticable" is a standard by which rules promulgated by MED are judged. The fact that the term "unreasonably impracticable" was not used in HB 14-1366 signals an intent on the part of the General Assembly to afford the term used, "practicable" in this instance, a different meaning. See *Carlson v. Ferris*, 85 P.3d 504 (Colo.2003) ("use of different terms [within the same statute or code] signals an intent on the part of the General Assembly to afford those terms different meanings").

Under the constitutional definition, a regulation is "unreasonably impracticable" when "the measures necessary to comply with the regulation [] require such a high investment of risk, money, time, or any other resource or asset that the operation of a marijuana establishment is not worthy of being carried out in practice by a reasonably prudent businessperson." See the Colorado Constitution, Article 18, §16(2)(o).

This constitutional definition sets a very high standard for establishing that a regulation is "unreasonably impracticable." A regulation is not "unreasonably impracticable" simply because it is costly or difficult to follow. A regulation is only "unreasonably impracticable" if it is so costly or difficult to follow that it renders operation of a marijuana establishment economically unsustainable.

In this context, MED's regulations would only be considered "unreasonably impracticable" if they alone were so onerous as to force the "reasonably prudent businessperson" to forego operating a products manufacturing facility, and the economic opportunity inherent in doing so. Here, the "reasonably prudent businessperson" is not just an average products manufacturer, it is an objective standard that contemplates a composite of shrewd business judgment in relation to challenges posed by MED's regulations. See *generally Freedom from Religion Foundation, Inc. v. Hickenlooper*, 2012 WL 1638718 (Colo.App.).

Estimates from the Governor's office suggest that marijuana sales in Colorado will approach \$1 billion this fiscal year. According to recent media reports, sales of edible marijuana products make up 40 percent of the state's marijuana market, or approximately \$400 million. In light of the economic opportunities inherent in operating a products manufacturing facility, MED can safely assume that shrewd businesspeople will be eager to participate in Colorado's edibles market in spite of the costs they would incur marking their edible products.

In this rulemaking, MED must consider both standards, and "thread the needle" between what it is required to do pursuant to HB 14-1366 (i.e. require that edible products bear a symbol) and what it is forbidden from doing pursuant to the constitutional prohibition on "unreasonably impracticable" regulations.

### **Stakeholders Affected**

Children, parents, grandparents, guardians, principals, teachers, school resource officers, law enforcement officers, and others will be provided with the tools they need to determine when a food product contains marijuana.

### **Implementing Authorities**

Colorado General Assembly, Colorado Department of Revenue

Supporting Comments from Work Group Members	
1.	<p>Public and consumer safety should be the number one priority of marijuana manufacturers, retailers, testing facilities, advocacy groups, regulators, the MED, and lawmakers. Marking edible marijuana products promotes public and consumer safety.</p> <p>An additional set of methods for marking edible marijuana products is described in Appendix N, based on the advice of a food product development expert with 44 years of experience in the food industry, where customer safety is a primary consideration. All methods are capable of being done and will be effective for applying a symbol to edible marijuana products, while the costs to manufacturers are not overly burdensome. Edible marijuana products currently on the market are already being marked using these methods.</p> <p>Molds can be purchased for \$5,000 to \$10,000, with the only ongoing cost being replacement of worn-out molds. Airbrushing units and stencils, as well as edible film and printing materials, can be purchased for a very low price, including ongoing dyes and labor costs. Frosting and stenciling/branding can also be done inexpensively.</p>
2.	<p>One instance of support was registered without comment for this recommendation in its entirety.</p>

### Dissenting Comments from Work Group Members

1.	<p>It is not necessary to mark marijuana products themselves in order to satisfy the requirements of HB 14-1366. Just as for alcohol, the package can serve as the principal means of identifying edible marijuana products.</p> <p>There are indeed ways to do some of the things listed in this recommendation to mark edible marijuana products, and some manufacturers have already taken steps to do so. However, many of these methods are beyond the capacity of most marijuana manufacturers in Colorado, due to the small size of their operations and their inability to access capital to purchase expensive pieces of equipment. Data from one large marijuana products manufacturer in Colorado indicated that a single set of chocolate molds to have THC messages imprinted on their products cost \$15,000 in 2014. More detailed information about the costs and feasibility of using custom molds in the production of edible marijuana products is presented in Appendix O.</p> <p>If required to mark or stamp edible marijuana products, many manufacturers will be forced to stop production of some categories of edible products. These products will not simply go away, but rather their production will shift to unlicensed manufacturers, thwarting the various efforts to make them safer. In order protect children and adults from accidental or unintentional ingestion, it is important to keep the production of edible marijuana products in the hands of licensed marijuana establishments, whose products are tested, packaged and labeled.</p> <p>In addition to the cost concerns, there are other concerns regarding the practicability of stamping, shaping, and coloring edible marijuana products. Baked goods such as brownies and cookies cannot be effectively imprinted, and because of their porous nature, they cannot be airbrushed. Furthermore, stamping most shapes on a baked good would affect the integrity of the product and make it break apart easily.</p> <p>If an underage person wants to hide the fact that he or she possesses an illegal product, marijuana or otherwise, he or she is likely to destroy or dispose of any identifiable characteristic, thus defeating the purpose of affixing this characteristic directly to the product.</p> <p>It is not evident that the feared scenarios of party-goers being drugged with edible marijuana products without their knowledge are actually taking place. If this were to happen, the individuals perpetrating these offenses would be engaging in illegal activities for which they should be prosecuted.</p>
2.	<p>The marking solutions suggested in this recommendation were directed either at a home cook or a large-scale manufacturer with a fully automated manufacturing line. In reality, marking products in the marijuana industry is likely to be much more difficult, and would require multiple methods, the purchase of hundreds of thousands of dollars worth of new equipment, and thousands of man hours to develop new formulations and standard operating procedures.</p> <p>More importantly, there is no data to show that marking edible marijuana products would help reduce accidental ingestions in children, and there is some evidence showing that marking products or packaging could backfire, as in the case of “Mr. Yuck” to mark poisonous items. It would be risky to implement marking requirements for edible marijuana products without having data to show (1) that marking products would reduce accidental ingestion, (2) that marking products would not unintentionally be attractive to infants, toddlers, or teenagers, and (3) that the symbol could be standardized across all product types.</p>

### Dissenting Comments fro Work Group Members

3.	<p>The word “practicable” appears in HB 14-1366 and is not synonymous with the word “possible,” as is claimed in the rationale of this recommendation. The bill was significantly amended between introduction and passage, such that the intent of its initial sponsors is not as significant as the actual text of the bill that was passed and signed into law.</p> <p>The methods proposed in this recommendation for marking edible marijuana products are impractical and excessively expensive. More detail about the limitations of marking products is contained in Recommendation 11.</p> <p>Marking edible marijuana products will be ineffective at preventing ingestion by young children and may make these products more attractive to older children. Any person wishing to hide these products from parents or law enforcement officers will not find marking to be a serious impediment. Therefore, marking may be effective solely to prevent accidental ingestion by adults. To prevent this, a more effective measure would be to have people keep the items within their original packaging until consumed.</p>
4.	<p>The representative from Children’s Hospital noted that there is no known shape, stamp, or color that will deter a child from eating a product, such that marking products in these ways would not deter children from ingesting them.</p> <p>All methods suggested in this recommendation are impracticable, as described below. Most methods require NSF International-certified equipment, for which cost estimates are provided below. Given that the marijuana industry lacks access to banking services and therefore to loans, manufacturers will be unable to purchase these costly machines. Therefore this recommendation is cost-prohibitive and “impracticable” for manufacturers. Because the choice of symbol or wording has a bearing on how practicable it is to affix it to products, this symbol or wording must be determined before rule-making is completed on this issue.</p> <p><b>Brownies:</b> The airbrushing equipment noted in this recommendation is non-commercial grade and is meant for a use with only a few units, whereas marijuana manufacturers may produce 4000 or more units per day. A commercial-grade airbrushing system costs as much as \$150,000.</p> <p><b>Cookies, Cakes, Granola Bars, Crackers, Pastries, and Superfood:</b> Airbrushing involves the same issues as mentioned above for brownies. Shaping is a more economical solution for these products, but no shape was determined by the group to be effective for deterring children from eating marijuana products.</p> <p><b>Chocolate:</b> Custom candy molds are reasonable methods for marking products, but no shape was determined by the group to be effective for deterring children from eating them.</p> <p><b>Hard and Soft Candy:</b> imprinting pills and candies must be done with commercial grade, NSF International-certified equipment, and these machines cost a minimum of \$100,000 each.</p> <p><b>Bulk Foods and Liquids:</b> The Work Group could not agree on a color that would deter children from ingesting edible marijuana products and alert adults that the product contains marijuana. Also, some manufacturers strictly use organic ingredients, but there is no known food color or dye in the marketplace today that is made up entirely of organic ingredients.</p>



## No. 4 - Marking Edible Marijuana Products Directly whenever Possible

Presented By: Smart Colorado

**4.1** Whenever it is possible to apply a symbol to an edible marijuana product itself, marijuana manufacturers must be required to do so, rather than relying on the product's packaging to serve as the means of identifying that it contains marijuana.

**4.2** When it is not possible to apply a symbol to an edible marijuana product, the existing packaging and labeling requirements contained in MED 1 CCR 212-2, Permanent Rules Related to the Colorado Retail Marijuana Code, Rules 1004.5 and 1006.5, should be applied.

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
3.	Identify Edible Marijuana Products Outside their Packaging	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making		
Defensible	The recommendation describes what MED must do to comply with the legislative directive promulgated in HB 14-1366.	✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

HB 14-1366 states that it is the intent of the General Assembly to “ensure that edible retail marijuana products are readily identifiable by the general public,” and directs the State Licensing Authority to “promulgate rules requiring that edible retail marijuana products be clearly identifiable, when practicable, with a standard symbol indicating that it contains marijuana.”



Because the package containing a marijuana product is not itself a marijuana product, the term "edible retail marijuana product" in HB 14-1366 should be understood to mean the marijuana product itself and not the package containing it.

Comparison of the language of HB 14-1366 to previous legislation related to packaging and labeling of marijuana products also supports the interpretation that the new bill intended that marijuana products themselves, rather than their packages and labels, be marked with a universal symbol. §12-43.4-202(3)(a)(vii)(O), C.R.S. states that the MED must promulgate labeling requirements that include "a universal symbol indicating [a] package contains marijuana," whereas HB 14-1366 states that the MED must "promulgate rules requiring edible retail marijuana products be clearly identifiable, when practicable, with a standard symbol indicating that it contains marijuana."

Statements from HB 14-1366's principal sponsors also confirm that their intent in enacting the bill was "that the products themselves, and not the products' packaging, bear the symbol mandated in the bill." See Appendix G for their letter to the HB 14-1366 Work Group, which clarifies their intent when enacting the bill, as well as other important points about correctly interpreting it. Senator Owen Hill, a HB 14-1366 Work Group member, indicated during the Senate floor debate of the bill that his goal in drafting it was that children and adults would be able to tell outside the packaging that a product contains marijuana.

Given all the arguments presented above, HB 14-1366 should be interpreted to require that edible marijuana products, and not the products' packaging or labeling, should be marked with a standard symbol whenever possible.

Should the mandate of HB 14-1366 be interpreted to allow a product's packaging and labeling to serve as the means of identifying that a product contains marijuana, the directive of HB 14-1366 would not be met, and the new rules to be promulgated therefrom would be redundant with existing legislation and rules related to the packaging and labeling of edible marijuana products. See §12-43.4-202(3)(a)(vii)(O), C.R.S. and MED 1 CCR 212-2, Rules 1004.5(C)(1)(h) and 1006.5(C)(1)(f), discussed further below.

### **Statutory Authority or Regulation Supporting the Regulation**

HB 13-1317, codified as §12-43.4-202(3)(a)(vii)(O), C.R.S. directed the MED to promulgate labeling requirements including "a universal symbol indicating [a] package contains marijuana." Pursuant to this mandate, the MED promulgated rules requiring that every package holding an edible marijuana product have affixed to it a universal symbol indicating that the package contains marijuana. See MED 1 CCR 212-2, Permanent Rules Related to the Colorado Retail Medical Code, Rules 1004.5(C)(1)(h) and 1006.5(C)(1)(f).

Should HB 14-1366 be interpreted as merely requiring that a symbol be placed on a product's packaging, even in instances where it is possible to apply a symbol the product itself, HB 14-1366 would be reduced to a mere reiteration of the existing legislation and rules, which the

Colorado Supreme Court has repeatedly indicated should be avoided. See *Colorado Compensation Ins. Authority v. Jorgensen*, 992 P.2d 1156 (Colo. 2000); *Leaffer v. Zarlengo*, 44 P.3d 1072 (Colo. 2002); *Wolford v. Pinnacol Assurance*, 107 P.3d 947 (Colo. 2005).

Further, the Colorado Supreme Court has stated in a series of cases that it must be presumed that, when the General Assembly makes a substantive amendment to a statute, it intends to change the law. See *Montez v. People*, 269 P.3d 1228, 1230-31 (Colo. 2012); *People v. McCullough*, 6 P.3d 774, 778 (Colo.2000); and *People v. Hale*, 654 P.2d 849, 851 (Colo.1982).

As such, it should be presumed that HB 14-1366 was intended to change the existing laws and rules, and not merely restate them. Prior to the passage of HB 14-1366, §12-43.4-202, C.R.S. had already required that the MED promulgate rules mandating that marijuana packaging be marked with a symbol, but the statute did not require that edible marijuana products themselves bear a symbol. HB 14-1366 can thus be interpreted as having amended §12-43.4-202, C.R.S. to include the requirement that, when possible, edible marijuana products themselves bear a symbol.

### Stakeholders Affected

Children, parents, grandparents, guardians, principals, teachers, school resource officers, law enforcement officers, and others will be provided with the tools they need to determine when a food product contains marijuana.

### Implementing Authorities

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment

Supporting Comments from Work Group Members	
1.	Public and consumer safety should be the number one priority of marijuana manufacturers, retailers, testing facilities, advocacy groups, regulators, the MED, and lawmakers. Marking edible marijuana products promotes public and consumer safety.  A set of methods for marking edible marijuana products is described in Appendix N, based on the advice of a food product development expert with 44 years of experience in the food industry, where customer safety is a primary consideration. All methods are capable of being done and will be effective for applying a symbol to edible marijuana products, while the costs to manufacturers are not overly burdensome. Edible marijuana products currently on the market are already being marked using these methods.
2.	One instance of support was registered without comment for this recommendation in its entirety.

Dissenting Comments from Work Group Members	
1.	The MED can fulfill its obligation under HB 14-1366 by allowing the packaging and labeling of a marijuana product to serve as the identifying agent to indicate that the product contains marijuana.
2.	Marking edible marijuana products will be ineffective at preventing ingestion by young children and may make these products more attractive to older children. Any person wishing to hide these products from parents or law enforcement officers will not find marking to be a serious impediment. Therefore, marking may be effective solely to prevent accidental ingestion by adults. To prevent this, a more effective measure would be to have people keep the items within their original packaging until consumed.
3.	There is no data to show that marking edible marijuana products would help reduce accidental ingestions in children, and there is some evidence showing that marking products or packaging could backfire, as in the case of “Mr. Yuck” to mark poisonous items. It would be risky to implement marking requirements for edible marijuana products without having data to show (1) that marking products would reduce accidental ingestion, (2) that marking products would not unintentionally be attractive to infants, toddlers, or teenagers, and (3) that the symbol could be standardized across all product types.

## No. 5 - Labeling to Require that Edible Marijuana Products Stay Within Original Packaging

*Presented By: Marijuana Licensee*

**5.1 Require additional labeling on edible retail marijuana products to indicate that the product must stay within its original package until consumed, and that failure to comply could result in possible legal action and liability.**

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
2.	Strengthen Packaging and Labeling Requirements	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Operable</b>	This recommendation is easy to implement and enforce, because the same labeling message can be placed on the packaging of every type of marijuana product.	✓
<b>Systematic</b>	This recommendation is systematic across all types of edible marijuana products.	✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

There is no single shape, color, smell, or symbol that can be used in a uniform fashion across the entire range of edible marijuana products, making it difficult to mark these products directly.

The Colorado Department of Health and Environment has stated that the most effective means of deterring accidental ingestion are through packaging, labeling, and keeping marijuana products out of the reach of children. However, when a product is removed from its original, child-resistant, and properly labeled packaging, these means of identifying that it contains marijuana and protecting against accidental ingestion are lost. This recommendation counteracts this danger and helps to avoid confusion between edible marijuana products and similar products not containing marijuana by advising consumers that the edible marijuana products must stay in their original packaging until consumed.

### Statutory Authority or Regulation Supporting the Regulation

None were identified in the recommendation.

### Stakeholders Affected

Consumers will have better knowledge about what they are consuming, and are less likely to accidentally ingest edible marijuana products if they remain in the package until they are consumed.

### Implementing Authorities

Colorado General Assembly, Colorado Department of Revenue

Supporting Comments from Work Group Members	
1.	Edible marijuana products should remain in their child-resistant packaging until consumed, as is the usual practice for medications.
2.	The labels on edible marijuana products need to be reevaluated. There are several pieces of information that do not add value to the label and should be removed, because they detract from the most important information that needs to stand out. A few things need to be added, including an updated universal symbol and a graphic symbol showing or telling consumers to store this product in its original packaging out of the sight and reach of children.
3.	One instance of support was registered without comment for this recommendation in its entirety.

Dissenting Comments from Work Group Members	
1.	This recommendation ignores the intent, language, and directives of the Colorado General Assembly when enacting HB 14-1366. The legislative declaration of HB 14-1366 states the intent of the Colorado General Assembly to ensure that edible retail marijuana products, not their packaging or labeling, are readily identifiable by the general public. As such, the edible marijuana products themselves should be marked whenever possible, rather than relying only on packaging and labeling to identify them.
2.	Creating a warning such as the one indicated in this recommendation falls outside the scope of HB 14-1366 and is unnecessary because industry members are likely to voluntarily add such statements without any regulatory directive.
3.	This recommendation does not address the identification of edible marijuana products outside their packaging.

## No. 6 (Merged with No. 8) - Universal Symbol, Labeling, and Consumer Education<sup>2</sup>

No. 6 Presented By: Marijuana Licensee

No. 8 Presented By: Colorado Legislator

- 6.1** Reconfigure the universal symbol currently used on labels for edible marijuana products to include a marijuana leaf behind the current symbol, which is attached in Appendix P. Allow manufacturers to use this symbol as a watermark on the label, which will enable them to increase its size without having to create larger labels.
- 6.2** Reduce and clarify the language currently required on the labels of edible marijuana products, to focus on the most important safety issues.
- 6.3** Include the following statement on labels for edible marijuana products: “For safety, keep this product in its original packaging until consumed.”
- 6.4** Commence consumer education programs to raise awareness about the universal symbol and instruct the public about how to safely store edible marijuana products and keep them out of the reach of children.

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
2.	Strengthen Packaging and Labeling Requirements	✓
Other Types of Recommendation		
5.	Increase Consumer Education	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
d.	Makes it clear that the product is safe for consumers.	✓
e.	Utilize a universal symbol.	✓

<sup>2</sup> Original recommendations 6 and 8 were very similar and were therefore merged into a single recommendation for this report.

Application of MED Guiding Principles for Rule-Making		
<b>Defensible</b>	This recommendation is defensible because it does not place an unreasonable burden on manufacturers to be able to comply.	✓
<b>Operable</b>	This recommendation does not require manufacturers to re-work any aspect of the food production process, and is easy for the MED to regulate because the symbol and labeling requirements are consistent for different types of edible marijuana products.	✓
<b>Transparent</b>	The universal symbol on the package of an edible marijuana product allows people to easily determine that the product contains marijuana.	✓
<b>Systematic</b>	MED field officers will be able to easily identify whether the product is in compliance with the revised symbol and labeling requirements.	✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

Presentations to the Work Group by representatives of the CDPHE and Children's Hospital Colorado indicated that the best way to reduce accidental ingestion of harmful substances by young children is to keep them out of the reach of children through safe storage practices and child-resistant packaging. As such, it is strongly argued that changing the shape, size, color, or smell of a marijuana product would not be effective in preventing accidental ingestions by children.

This recommendation therefore focuses on improving the universal symbol on the packaging of edible marijuana products, improving labeling requirements, and educating consumers about the symbol and how to safely store edible marijuana products, in order to prevent accidental and unintentional ingestions by both adults and children.

Appendix P presents the universal symbol currently being affixed to the labels of edible marijuana products, which is proposed for revision. Consumers could more easily identify edible marijuana products if the universal symbol included a graphic image such as a marijuana leaf, and if the symbol became widely known.

The current language required on labels for edible marijuana products is lengthy and some is unnecessary, which inhibits consumers from reading it. Reducing and clarifying this language would make it easier for consumers to read the labels and make use of the safety information provided, which would in turn make these products safer. Adding language instructing consumers to keep edible marijuana products in their original packaging until consumed will help consumers to recognize that these products contain marijuana.

Creating an education campaign about how to recognize the universal symbol and safely store marijuana products would reinforce these labeling improvements.

### Statutory Authority or Regulation Supporting the Regulation

Article XVIII, section 16 of the Colorado Constitution governs personal use and regulation of marijuana. §12-43.4-202(3)(a)(VII), C.R.S. addresses labeling requirements for retail marijuana and retail marijuana products sold by licensed retail marijuana establishments.

### Stakeholders Affected

Anyone who views the reconfigured universal symbol on the packaging of an edible marijuana product should be able to quickly recognize that the product contains marijuana. Consumers will have better knowledge about which products contain marijuana and how to protect themselves and others from accidental or unintentional ingestion.

### Implementing Authorities

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment

Supporting Comments from Work Group Members	
1.	One instance of support was registered for this recommendation, with the qualification that a symbol other than the marijuana leaf may be more appropriate.
2.	Packaging, labeling, and education are the best ways to keep the public safe.
3.	6.1-6.3: The labels on edible marijuana products need to be reevaluated. There are several pieces of information that do not add value to the label and should be removed, because they detract from the most important information that needs to stand out. A few things need to be added, including an updated universal symbol and a graphic symbol showing or telling consumers to store this product in its original packaging out of the sight and reach of children.
4.	6.4: Education must be a cornerstone of any future regulations, to assist consumers to know how to use and store edible marijuana products in accordance with Colorado laws and regulations. This education must be simple and clear, focusing on the most important messages, including (1) that edible marijuana products are for the use of persons 21 and over, (2) that they must be stored safely and kept out of the reach of persons under 21, and (3) the consequences of breaking the laws and regulations.



### Dissenting Comments from Work Group Members

1.	<p>This recommendation ignores the intent, language, and directives of the Colorado General Assembly when enacting HB 14-1366. The legislative declaration of HB 14-1366 states the intent of the Colorado General Assembly to ensure that edible retail marijuana products, not their packaging or labeling, are readily identifiable by the general public. As such, the edible marijuana products themselves should be marked whenever possible, rather than relying only on packaging and labeling to identify them.</p> <p>Moreover, Colorado law and rules already require that marijuana packaging be marked with a symbol indicating the package contains marijuana. See §12-43.4-202(3)(a)(vii)(O), C.R.S. and MED 1 CCR 212-2, Permanent Rules Related to the Colorado Retail Marijuana Code, Rules 1004.5(C)(1)(h) and 1006.5(C)(1)(f). If, in fulfilling the legislative directive handed down in HB 14-1366, the Colorado General Assembly and the MED require only that a symbol be placed on product packaging, even in instances where it is possible to apply a symbol to the product itself, HB 14-1366 would be reduced to a mere reiteration of the packaging and labeling requirement set forth in §12-43.4-202(3)(a)(vii)(O), C.R.S.</p>
2.	<p>This recommendation does not address identification of edible marijuana products outside their packaging.</p>

## No. 7 - Take No Action at this Time, Labeling, and Consumer Education

Presented By: Marijuana Licensee

**7.1 Take no action at this time to make edible retail marijuana products clearly identifiable, in order to determine if the rules currently in place to regulate these products are sufficient to ensure that the public can identify them and avoid accidental ingestion.**

**7.2 If the current rules are found to be insufficient for ensuring that the public can identify edible marijuana products and avoid accidental ingestion, revise the current labeling requirements and implement education programs.**

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
1.	Take No Action at this Time to Identify Edible Marijuana Products	✓
2.	Strengthen Packaging and Labeling Requirements	✓
Other Types of Recommendation		
5.	Increase Consumer Education	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Defensible</b>	If needed, the new labeling requirements can be developed by a collaborative group of stakeholders.	✓
<b>Operable</b>	Labeling is already required and can be revised if needed. Regulators can easily check compliance with any new labeling requirements.	✓
<b>Systematic</b>	New labeling would be applicable to all edible marijuana products.	✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

It is not practical to stamp and shape edible marijuana products. At the same time, the rules that were promulgated October 30, 2014 appear to be effective at making edible marijuana products identifiable to the public and preventing accidental ingestion, given that there have been few incidents related to edible marijuana products other than a few cases of accidental

ingestion, the rate of which is very low relative to the number of products on the market. As such, there is no need to take any action at this time to make edible marijuana products identifiable.

If these rules prove to be insufficient to ensure that the public can identify edible marijuana products and avoid accidental ingestion, the best steps would be to revise labeling requirements and pursue educational programs for consumers.

### **Statutory Authority or Regulation Supporting the Regulation**

MED 1 CCR 212-2, Permanent Rules Related to the Colorado Retail Marijuana Code, Rules 1004.5 and 1006.5 relate to packaging and labeling of edible marijuana products.

### ***Stakeholders Affected***

Labeling requirements help consumers to better understanding potency and serving sizes for edible marijuana products. Better education teaches consumers how to safely consume these products.

### **Implementing Authorities**

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment

<b>Supporting Comments from Work Group Members</b>	
1.	One instance of agreement was registered without comment for this recommendation in its entirety.
2.	7.1: It makes sense to wait for the roll-out of child-resistant packaging and new language on labels because we do not currently have data to prove that shaping, stamping or coloring will be effective means of deterring accidental ingestions. Data should be collected over the next year on the effects of the new regulations.
3.	7.2: The labels on edible marijuana products need to be reevaluated. There are several pieces of information that do not add value to the label and should be removed, because they detract from the most important information that needs to stand out. A few things need to be added, including an updated universal symbol and a graphic symbol showing or telling consumers to store this product in its original packaging out of the sight and reach of children.
4.	7.2: Education must be a cornerstone of any future regulations, to assist consumers to know how to use and store edible marijuana products in accordance with Colorado laws and regulations. This education must be simple and clear, focusing on the most important messages, including (1) that edible marijuana products are for the use of persons 21 and over, (2) that they must be stored safely and kept out of the reach of persons under 21, and (3) the consequences of breaking the laws and regulations.

Dissenting Comments from Work Group Members	
1.	This recommendation ignores the intent, language, and directives of the Colorado General Assembly when enacting HB 14-1366. The legislative declaration of HB 14-1366 states the intent of the Colorado General Assembly to ensure that edible retail marijuana products, not their packaging or labeling, are readily identifiable by the general public. As such, the edible marijuana products themselves should be marked whenever possible, rather than relying only on packaging and labeling to identify them.
2.	This recommendation does not suggest any rule change and does not address the identification of edible marijuana products outside their packaging.

**No. 8 - (Merged with No. 6)****No. 9 - Universal Symbol, Labeling, Data Collection, and Consumer Education**

**Presented By: Marijuana Licensee**

- 9.1 All edible retail marijuana products should be labeled with a universal seal that includes either a marijuana leaf or the letters “THC.” The seal should also communicate that the product:**
- a. Contains marijuana;**
  - b. Was made by a licensed manufacturer;**
  - c. Is regulated by the Colorado Marijuana Enforcement Division; and**
  - d. Should be stored in its original packaging until consumed, and kept out of the sight of persons under 21 years of age and pets.**
- 9.2 The warning labels currently required by statute should be reviewed, and any unnecessary wording should be removed, in order to make the seal more visible and ensure that the verbal information that is presented is clear, concise, and easy to read.**
- 9.3 The following labeling requirements should be REMOVED:**
- a. Statement regarding child-resistant packaging;**
  - b. Statement about having passed contaminant testing;**
  - c. List of non-organic pesticides, herbicides, and fungicides;**
  - d. Warning about oversight; and**
  - e. Batch number for oils.**
- 9.4 The following labeling requirement should be MODIFIED: The statement related to the serving size, number of servings, and total amount of active THC in the product should be more clearly communicated and displayed.**

**9.5 The state should put into place comprehensive measures for tracking and collecting data on accidental and unintentional over-ingestion of marijuana products, and on the possession and use of marijuana products at schools.**

- a. Poison control centers and hospitals should be required to collect the following information about cases of over-ingestion of marijuana products: (1) the source of the marijuana product, including whether it was acquired from a licensed marijuana establishment or on the black market; (2) how the product was stored before the ingestion took place; and (3) the circumstances under which the product was ingested, including whether the ingestion was accidental or intentional.**
- b. School resource officers should be required to collect the following information when marijuana is found in the possession students: (1) the source of the marijuana product, including whether it was acquired from a licensed marijuana establishment or the black market; and (2) the type of product found in the possession of students.**

**9.6 The state should commence a robust consumer education campaign to advise adults how to speak with their children about marijuana use and how to store marijuana safely and out of the sight and reach of persons under the age of 21 and pets. This campaign should include clear messaging about the legal ramifications and consequences of consuming marijuana for people under 21, and of distributing marijuana to persons under 21.**

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
2.	Strengthen Packaging and Labeling Requirements	✓
Other Types of Recommendation		
5.	Increase Consumer Education	✓
6.	Improve Data Collection and Analysis	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
d.	Makes it clear that the product is safe for consumers.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Operable</b>	Simplifying the labeling requirements and standardizing them for all edible marijuana product types makes it easier for manufacturers to stay in compliance, and for the MED to regulate.	✓
<b>Transparent</b>	This labeling solution makes it readily clear which manufactures are in compliance.	✓
<b>Systematic</b>	All edible marijuana product types have the same labeling requirements.	✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

Because of the diversity of edible marijuana product types on the market and the difficulty and cost of marking these products directly, improving the labeling of products is a useful way to identify that they contain marijuana and to hold all manufacturers to a single standard of compliance. For manufacturers that make multiple product types, it will be much easier and less expensive for them to comply with a single labeling requirement to identify that all of their products contain marijuana than it would be to manage the multiple methods by which the different marijuana products would need to be marked. The cost of directly marking products could easily become unsustainable for manufacturers that make more than one product.

There are additional reasons not to mark edible marijuana products directly. There is no evidence to suggest that edible marijuana products are currently being offered unknowingly to unsuspecting adults or children, to warrant the difficulties and costs involved in imposing a marking requirement for these products. If such activities do occur, they should be prosecuted to the full extent of the law. Additionally, marking edible products directly may have the unintended consequence of making these products more attractive to and more easily identified by adolescents seeking to illegally use them.

Strong packaging rules are already in place for edible marijuana products through the MED rulemaking process that took place in 2014, but labeling of products continues to be overly complicated and confusing to consumers. Adapting the labeling requirements in a way that clearly and concisely identifies edible retail marijuana products and communicates how to store these products safely will complement the provisions already in place for packaging, and make these products safer.

Following are arguments for removing the identified items from the current labeling requirements.

**Statement regarding child-resistant packaging:** This statement is unnecessary because the new rules require that all products be provided by the manufacturer in child-resistant packaging.

**Statement about having passed contaminant testing:** This statement is unnecessary because testing is mandatory and a product must pass the required tests before it can be distributed.

**List of non-organic pesticides, herbicides, and fungicides:** This list is unnecessary, since these items are included within the requirements for contaminant and pesticide testing, and because the same data is captured both in METRC and in the manufacturer's records. Moreover, such labeling is not required for food products that do not contain marijuana.

**Warning about oversight:** This warning is unnecessary, because the manufacturing of edible marijuana products is already being conducted with oversight for health and safety issues. Products are tested for water activity by the CDPHE, and for potency, homogeneity, and contaminants by a state-licensed laboratory.

**Batch number for oils:** This number is redundant, because the product batch number allows for referral to the oil batch number. The oil batch number should be required only in the manufacturer's records.

In addition to improving labeling, it is also important to collect standardized data on actual instances of over-ingestion of marijuana by adults and children, and illegal possession and use of marijuana by school children. Such data collection will better inform regulatory action and potentially avoid putting into place unnecessary and costly regulations on the nascent legal edible marijuana products industry. If the data collection efforts confirm that the majority of over-ingestions and marijuana possession and/or use by school children stems from edible marijuana products sold on the black market, adding more costs to the production of legal marijuana products through strong regulation will only exacerbate these problems. The increased costs would continue to drive consumers to the black market, where products are not tracked, tested for quality, or distributed in a way that encourages safe consumption or prevents their use by children.

### **Statutory Authority or Regulation Supporting the Regulation**

HB-1366 states in the legislative declaration that it is the intent of the General Assembly to "Protect people from unintentional ingestion of edible retail marijuana products." Effective ways to do this are to educate adults about safe storage, educate parents about how to speak with their children about marijuana use, enforce child-resistant packaging, and strengthen labeling requirements.

### **Stakeholders Affected**

Retail marijuana product manufacturers would have to rework their labels and would need time to do so. Dispensaries would need time to sell their existing inventories of products labeled under the previous requirements. The CDPHE would need to work with poison control centers, hospitals, and schools to develop questionnaires, train these organizations in data collection methods, and direct them gather the needed data.



### Implementing Authorities

Colorado General Assembly, Governor's Office of Marijuana Coordination, Colorado Department of Revenue, Colorado Department of Public Health and Environment, poison control centers, hospitals, schools

Supporting Comments from Work Group Members	
1.	The labels on edible marijuana products contain too much information that is no longer correct or relevant, effectively crowding out important information that consumers do need to know.
2.	This recommendation accurately points out the weaknesses of the current labeling requirements and proposes appropriate alternative language.
3.	This recommendation is in line with other recommendations to wait for the roll-out of child-resistant packaging and collect solid data before requiring manufacturers to shape, stamp or color edible marijuana products themselves. Many of the suggested label changes are already being implemented voluntarily by manufacturers without any legislation or regulation requiring them to do so.

Dissenting Comments from Work Group Members	
1.	<p>The MED should create rules that require edible marijuana products to be clearly identifiable outside of their packaging, given the potential scenarios where edible marijuana products that look similar to products not containing marijuana are offered outside their packages to unknowing adults and children.</p> <p>This recommendation ignores the intent, language, and directives of the Colorado General Assembly when enacting HB 14-1366. The legislative declaration of HB 14-1366 states the intent of the Colorado General Assembly to ensure that edible retail marijuana products, not their packaging or labeling, are readily identifiable by the general public. As such, the edible marijuana products themselves should be marked whenever possible, rather than relying only on packaging and labeling to identify them.</p> <p>Moreover, Colorado law and rules already require that marijuana packaging be marked with a symbol indicating the package contains marijuana. See §12-43.4-202(3)(a)(vii)(O), C.R.S. and MED 1 CCR 212-2, Permanent Rules Related to the Colorado Retail Marijuana Code, Rules 1004.5(C)(1)(h) and 1006.5(C)(1)(f). If, in fulfilling the legislative directive handed down in HB 14-1366, the Colorado General Assembly and the MED require only that a symbol be placed on product packaging, even in instances where it is possible to apply a symbol to the product itself, HB 14-1366 would be reduced to a mere reiteration of the packaging and labeling requirement set forth in §12-43.4-202(3)(a)(vii)(O), C.R.S.</p>
2.	This recommendation does not address the identification of edible marijuana products outside their packaging.

## No. 10 - Limit Edible Marijuana Products to Lozenges and Tinctures

Presented By: Colorado Department of Public Health and Environment

**10.1** The production of retail edible marijuana products should be prohibited, with the exception of (1) lozenges and hard candies; and (2) tinctures. Both types of allowed products should be clearly labeled using the universal symbol.

**10.2** Lozenges or hard candies should be manufactured in single 10 mg doses and both types of allowed products should include clear dosing information on their labels.

### Recommendation Categories

#### Strategic Options for Rendering Edible Marijuana Products Identifiable

4.	Limit or Ban Categories of Edible Marijuana Products or Particular Products	✓
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### Elements of House Bill 14-1366 to which the Recommendation Applies

a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
e.	Utilize a universal symbol.	✓

### Application of MED Guiding Principles for Rule-Making

<b>Defensible</b>	Limiting the scope of allowable edible retail marijuana products is consistent with the intent of HB 14-1366 (1) to prohibit the explicit or implicit marketing of edible marijuana products to children and (2) to protect people from the unintentional ingestion of these products.	✓
<b>Operable</b>	Limiting the scope of allowable edible retail marijuana products simplifies the regulatory framework and makes it easier to implement.	✓
<b>Transparent</b>	Limiting the scope of allowable edible retail marijuana products reduces the likelihood that these products will be confused with other common food products.	✓
<b>Systematic</b>	Limiting the scope of allowable edible retail marijuana products simplifies the regulatory framework and allows it to be systematically implemented.	✓

### ***Rationale for the Recommendation and Issues it is Expected to Resolve***

Allowing the production of a multitude of edible retail marijuana products that are naturally attractive to children runs counter to the prohibition in Amendment 64 of marketing marijuana products to children, and encourages the accidental ingestion of these products by children. Amendment 64 and subsequent laws and rules were intended to decriminalize the use of retail marijuana, not to encourage the development and marketing of an array of edible marijuana products that are attractive to children, nor to create confusion among consumers about which foods contain marijuana and which do not.

Manufacturers of all edible products, whether containing marijuana or not, produce products with the intention of making them attractive to consumers. Attempts to mask the attractiveness of edible marijuana products to children through packaging and labeling is contradictory and ineffective.

Narrowing the range of allowed edible marijuana products to lozenges/hard candies and tinctures that are clearly labeled with the universal symbol would be consistent with the Amendment 64 requirement to prevent the marketing of marijuana products to children, and would:

1. Render edible marijuana products easy to recognize and distinguish from other food products;
2. Reduce their attractiveness to children;
3. Prevent their explicit or implicit marketing to children; and
4. Reduce the likelihood that children will accidentally ingest them.

### **Statutory Authority or Regulation Supporting the Regulation**

Amendment 64 prohibits the marketing of marijuana products to children. Allowing the production of edible marijuana products that are naturally attractive to children encourages their being marketed to children and increases the likelihood that children will accidentally ingest them.

The legislative declaration of HB 1366 states that it is the intent of the Colorado General Assembly (1) “that any person engaged in the sale of retail marijuana or its derivatives shall not explicitly or implicitly market or offer for sale these products to anyone under the age of 21;” and (2) “to protect people from the unintentional ingestion of edible retail marijuana products.”

### Stakeholders Affected

2. The general public will be able to readily distinguish edible marijuana products from other food products, reducing the current level of confusion surrounding this issue.
3. Parents' concerns regarding the close resemblance of edible marijuana products to traditional food items will be addressed, because all products other than lozenges/hard candies and tinctures would be prohibited and no longer on the market and potentially available to their children.
4. Consumers of edible retail marijuana products would benefit from the consistency and clear dosing information of the allowed edible marijuana products.

### Implementing Authorities

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment

#### Supporting Comments from Work Group Members

1.	One instance of support was registered for this recommendation, provided that all allowed edible marijuana products are identifiable outside their packaging.
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#### Dissenting Comments from Work Group Members

1.	Hard candies are no less attractive to children than other types of candy, but in any case, the marijuana industry does not market its products to children. Limiting the types of products on the market would have the effect of driving this production to unlicensed manufacturers. Moreover, selling tinctures encourages people to make their own edible marijuana products at home. Unlike products sold from licensed marijuana establishments, edible marijuana products produced both on the black market and at home are not tested and lack standardized dosing and packaging/labeling to protect against accidental or unintentional ingestion.
2.	This recommendation is not in alignment Amendment 64 of the Colorado Constitution.
3.	This recommendation was drafted without regard to its constitutionality and without considering the effect that its adoption might have in encouraging the black market.
4.	Eliminating products from the licensed market would drive consumers to the black market, where products are not tested, have unknown potency, and are not easily separated into 10mg or less servings. If the intent is to reduce accidental ingestion, the focus must be on safe packaging, labeling, and storage.

## No. 11 - Labeling, Universal Symbol, and Data Collection

Presented By: Marijuana Licensee

**11.1 Focus on improved labeling as the means of identifying edible marijuana products, including the use of a message such as “THC: This is Cannabis” or a similar symbol on all labels.**

**11.2 Collect and analyze data on (1) the number of edible marijuana products produced and sold in Colorado; (2) the number of cases of accidental ingestion by children at all hospitals in Colorado; and (3) whether these cases are from edible marijuana products purchased from licensed marijuana establishments, purchased on the black market, or made at home.**

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
2.	Strengthen Packaging and Labeling Requirements	✓
Other Types of Recommendation		
6.	Improve Data Collection and Analysis	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
d.	Makes it clear that the product is safe for consumers.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making	
The Guiding Principles were not applied in the formulation of this recommendation.	

### Rationale for the Recommendation and Issues it is Expected to Resolve

Stamping, shaping, and coloring edible marijuana products are not preferred as the means of identifying edible marijuana products and preventing accidental and unintentional ingestions, for the following reasons:

1. The extensive variety of edible marijuana products on the market prevents a common stamp, shape, or color from being used for all products.
2. The methods that would be used to stamp, shape, or color edible marijuana products would not be unique to edible marijuana products, and are also found in foods not containing marijuana, which would create confusion.
3. The cost burden for stamping, shaping, and coloring edible marijuana products is overly burdensome for marijuana manufacturers, who do not have access to business loans from banks, as other businesses do.
4. There is no evidence to prove that that stamping, shaping, and coloring edible marijuana products would prevent accidental or unintentional ingestions.
5. Although the number of children approaching the emergency department at Children's Hospital Colorado for accidental ingestion of marijuana increased sharply starting in 2013 with the legalization of retail marijuana in Colorado, with eight children approaching the hospital in 2013 and 14 children approaching from January through October 2014, compared to eight total from 2005 to 2013,<sup>3</sup> this number of ingestions is small relative to the huge increase in the number of edible marijuana products on the market in Colorado since 2013.
6. Parents and other adults who use edible marijuana products are responsible for keeping these products out of the reach of children.

Representatives from the CDPHE and Children's Hospital Colorado who presented to the Work Group confirmed that the best ways to prevent accidental ingestion of harmful substances by children are proper storage, packaging, labeling, and consumer education.

Because labeling and child-resistant packaging are the only methods that can be used for all edible marijuana products, these methods would be easier to implement than stamping, shaping, and coloring products, and should be used to identify marijuana products.

By including on the labels a universal symbol that is recognizable, simple, and feasible for all edible marijuana products manufacturers to place conspicuously on the packaging, all of the elements of House Bill 14-1366 identified by this Work Group can be satisfied.

It is important to have accurate data on the number of marijuana products bought and sold in Colorado, as well as the number of accidental and unintentional ingestions in the state, in order to inform proposed regulations and better predict how successful a proposed regulation will be at protecting against these incidents, before imposing significant burdens on marijuana products manufacturers to change their product lines and manufacturing processes.

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<sup>3</sup> Denver Post, "Children's Hospital sees surge in kids accidentally eating marijuana," May 21, 2014. Data for children approaching the hospital from January through October 2014 were provided by Children's Hospital Colorado.

### Statutory Authority or Regulation Supporting the Regulation

The legislative declaration of HB 14-1366 indicates that it is the intent of the General Assembly to “protect people from the unintentional ingestion of edible retail marijuana products.” The recently released MED rules on packaging, labeling, and serving sizes (MED 1 CCR 212-1, Permanent Rules Related to the Colorado Medical Code) support these recommendations for better labeling and data collection.

### Stakeholders Affected

Consumers will be better informed about which products contain marijuana. The MED and the general public will have better information about the rate of accidental and unintentional ingestion of edible marijuana products compared to the total number of products bought and sold in Colorado.

### Implementing Authorities

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment, Marijuana industry representatives, poison control centers, hospitals

Supporting Comments from Work Group Members	
1.	11.1: The labels on edible marijuana products need to be reevaluated. There are several pieces of information that do not add value to the label and should be removed, because they detract from the most important information that needs to stand out. A few things need to be added, including an updated universal symbol and a graphic symbol showing or telling consumers to store this product in its original packaging out of the sight and reach of children.
2.	11.2: Better packaging and labeling are the best ways to prevent accidental ingestion of edible marijuana products.
3.	11.2: The data indicated in sub-recommendation 11.2 will assist in determining if the regulations and initiatives already in place or to be implemented by February 2014, including child-proof packaging, labeling with extensive warnings, educational materials handed out at the point of sale, and educational content made available on industry websites, are proving to be successful in deterring accidental ingestion of edible marijuana products by children.
4.	The rationale for this recommendation presents an excellent summary of the impracticability of stamping, shaping, and coloring edible marijuana products, and proposes practical and feasible alternatives.

Dissenting Comments from Work Group Members	
1.	<p>This recommendation ignores the intent, language, and directives of the Colorado General Assembly when enacting HB 14-1366. The legislative declaration of HB 14-1366 states the intent of the Colorado General Assembly to ensure that edible retail marijuana products, not their packaging or labeling, are readily identifiable by the general public. As such, the edible marijuana products themselves should be marked whenever possible, rather than relying only on packaging and labeling to identify them.</p> <p>Moreover, Colorado law and rules already require that marijuana packaging be marked with a symbol indicating the package contains marijuana. See §12-43.4-202(3)(a)(vii)(O), C.R.S. and MED 1 CCR 212-2, Permanent Rules Related to the Colorado Retail Marijuana Code, Rules 1004.5(C)(1)(h) and 1006.5(C)(1)(f). If, in fulfilling the legislative directive handed down in HB 14-1366, the Colorado General Assembly and the MED require only that a symbol be placed on product packaging, even in instances where it is possible to apply a symbol to the product itself, HB 14-1366 would be reduced to a mere reiteration of the packaging and labeling requirement set forth in §12-43.4-202(3)(a)(vii)(O), C.R.S.</p>
2.	<p>This recommendation does not agree with identifying edible marijuana products outside their packaging.</p>



## No. 12 - Data Collection and Analysis

Presented By: Marijuana Licensee

**12.1** Collect the following data in 12.2 and perform the following analyses in 12.3 in order to study the costs, benefits, and practicability of any future regulations related to edible marijuana products.

**12.2 Data Collection:**

- a. The number of incidents per year statewide related to the ingestion of edible marijuana products, including calls to poison control centers, emergency room visits, and hospital admissions.
- b. The nature of these incidents – accidental or intentional, involving adults and children.
- c. The source of the ingested marijuana products - regulated market, black market, or home production.
- d. The outcomes of these incidents.

**12.3 Data Analysis:**

- a. Compare the rates of incidence and severity of outcomes for over-ingestion of edible marijuana products to those for over-ingestion of other products, among different age groups.
- b. Estimate the compliance costs to manufacturers for different ways of identifying edible marijuana products – e.g., marking, shaping, and coloring. Include both initial capital costs and continuing costs.
- c. Determine the cost per quality-adjusted life year (QALY) for potential regulations related to edible marijuana products. Compare to other public health interventions and regulations in other industries.

Recommendation Categories		
Other Types of Recommendation		
6.	Improve Data Collection and Analysis	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
d.	Makes it clear that the product is safe for consumers.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Defensible</b>	Additional data on the nature and magnitude of problems related to edible marijuana products will help to establish defensible and transparent regulations for these products.	✓
<b>Transparent</b>		✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

The Work Group focused largely on potential options for marking, shaping, and coloring edible marijuana products, and on the costs to manufacturers for implementing these changes, with little available data on the nature and magnitude of problems related to edible marijuana products that need to be solved.

Inherent in the concept of “practicability” is a weighing of costs and benefits, but it is unclear what benefits will be achieved through marking, shaping, or coloring edible marijuana products. The edible marijuana products industry is willing to adopt measures that are reasonably assured to promote the health, safety and welfare of Colorado citizens. In order to develop rational and practicable regulations for edible marijuana products, and to garner the support of the industry behind these regulations, more data is needed on the nature and magnitude of the problems to be solved, and the benefits of the proposed regulations must be clear.

### Statutory Authority or Regulation Supporting the Regulation

Amendment 64, Section (5)(a) states that the regulations to be adopted by the Department of Revenue “shall not prohibit the operation of marijuana establishments, either expressly or through regulations that make their operation unreasonably impracticable.” In order to determine if a regulation is “unreasonably impracticable” for the operation of a marijuana establishment, it is necessary to determine a reasonable relationship between the expenses to be incurred by producers and the harm to be prevented by a proposed regulation.

### Stakeholders Affected

The public will benefit if its resources are directed to regulations that address the public health and safety issues with the highest priority and the highest potential for impact.

### Implementing Authorities

Colorado General Assembly, Governor's Office of Marijuana Coordination, Colorado Department of Public Health and Environment, Colorado Children's Hospital, other hospitals, poison control centers

Supporting Comments from Work Group Members	
1.	Data is lacking to understand what the real problems are related to edible marijuana products and make sound recommendations regarding their regulation. Children's Hospital Colorado and other organizations can shed light on where the edible products are coming from that have resulted in accidental and unintentional ingestions, and how the products were acquired.
2.	There is a significant need for reliable data on accidental ingestions. Most of the information referenced in the Work Group was anecdotal and much of the risk is still unknown. Several important pieces of data are needed, such as: if the product was from a legal, regulated vendor or from a black market supplier; if it was stored properly or left in an accessible place; if the potency was tested prior to consumption; and if the intended consumer understood how much he or she was consuming. This data must be available in order to craft solutions that will actually address the problems rather than heading down a path that, at best, might not fix the problem, and, at worst, could potentially compound the problems with new and unintended consequences.

Dissenting Comments from Work Group Members	
1.	<p>Data is indeed available now to demonstrate that there are problems associated with the use of edible marijuana products.</p> <p>During the third Work Group meeting, the representative from Children’s Hospital Colorado presented data showing that there has been a dramatic increase in accidental ingestions of marijuana by children in Colorado since 2010. He reported that the number of calls to regional poison control centers in 2013 for accidental ingestions by children was nearly four times the number in 2001, and that the number of calls in 2014, when retail marijuana became available, was on pace to be nearly three times as many as in 2013. See Appendix F for a summary of this data.</p> <p>In the public comment section of the third Work Group meeting, a high school senior testified to the Work Group that at least four of her peers had accidentally ingested edible marijuana products because they were unable to identify what they were eating. In March 2014, 15 students at Shaw Heights Middle School in Adams County were disciplined for consuming store-bought edible marijuana products at school.<sup>4</sup> Many of the students involved in the incident reported that they did not know they had been given food infused with marijuana.</p> <p>There is also evidence of the potential benefits of marking edible marijuana products outside their packaging. During Work Group meetings and in legislative hearings on HB 14-1366, numerous health care providers and injury prevention specialists have testified that applying a distinguishing symbol to edible marijuana products would have the following public safety benefits:</p> <ol style="list-style-type: none"> <li>1. Provide parents the tools they need to teach their children to identify infused products once the products are removed from their packaging</li> <li>2. Help prevent accidental ingestions of marijuana-infused products</li> <li>3. Ensure that marijuana-infused products are readily identifiable</li> <li>4. Assist healthcare professionals in treating patients harmed by marijuana ingestions</li> </ol> <p>These benefits justify the mandatory marking of these products.</p>
2.	This recommendation suggests more research prior to rule-making.

<sup>4</sup> CBS Denver, “Middle School Students Arrested for Pot Edibles,” March 10, 2014.  
<http://denver.cbslocal.com/2014/03/10/middle-school-students-arrested-for-pot-edibles/>.

## No. 13- Allowing Non-Licensees to Use Marijuana Testing Facilities

Presented By: Marijuana Licensee

**13.1 Allow persons without marijuana establishment licenses to use the services of state-licensed marijuana testing laboratories. These persons may include parents, school officials, marijuana users, and other parties wishing to know if a product contains marijuana, how much it contains, and if it is safe for consumption.**

Recommendation Categories		
Other Types of Recommendation		
7.	Allow Non-Licensees to Use Marijuana Testing Facilities	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
d.	Makes it clear that the product is safe for consumers.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Operable</b>	Wider access could be easily integrated into laboratory operations, which have extensive procedures already in place for handling, tracking, and disposing of marijuana samples.	✓
<b>Transparent</b>	Allowing wider access to licensed laboratories would reduce public uncertainty about the identity, potency and safety of edible marijuana products.	✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

Currently, only licensed marijuana establishments may access state-licensed marijuana testing laboratories, which are the principal providers of state-of-the-art marijuana testing services in Colorado. Licensed marijuana establishments include marijuana cultivation facilities, products manufacturers, medical marijuana dispensaries, and retail marijuana stores, all of which can send products to the laboratories through the Marijuana Enforcement Tracking Reporting and Compliance (METRC) system.

Because of this restricted access, parents, other caregivers, and school authorities are unable to confirm if various products found in the possession of children contain marijuana, and if so, how much they contain. Moreover, medical marijuana patients who manufacture marijuana products at home are not able to determine the dosing of these products and whether they

are safe to consume. Allowing non-licensees to access licensed marijuana testing facilities would allow these parties to ascertain whether or not products contain marijuana, how much they contain, and whether they are safe to consume.

This wider level of access could be easily integrated into laboratory operations, which have extensive procedures already in place for handling, tracking and disposing of marijuana samples. These procedures are reviewed during the certification process, and compliance is checked during MED site visits to ensure that there is no leakage of products obtained by laboratories from outside the METRC system.

It is unlikely that persons manufacturing or selling marijuana products on the black market would go to the trouble of testing the potency of their products at licensed laboratories if wider access to these facilities were granted, given that law enforcement would be much better able to track this activity and apprehend these offenders.

### **Statutory Authority or Regulation Supporting the Regulation**

Amendment 64 provided for the establishment of Marijuana Testing Facilities to “analyze and certify the safety and potency of marijuana” (Amendment 64, Section 16(2)(I), encoded in §12-43.4-103(21), C.R.S.). HB13-1317 stipulated that the MED shall have the authority to grant or refuse licenses for testing facilities (§12-43.4-202(2)(a)) and that it shall establish an “independent certification and testing program” (§12-43.4-202(3)(a)(IV)) for retail marijuana and marijuana products. Neither Amendment 64 nor HB13-1317 specified that licensed testing facilities may only provide services to licensed marijuana establishments.

### **Stakeholders Affected**

Parents, other caregivers, school officials, and medical marijuana patients would benefit from gaining access to state-of-the-art marijuana testing facilities in order to determine whether or not unknown product samples contain marijuana, how much they contain, and if they are safe for consumption.

### **Implementing Authorities**

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment, Colorado Department of Public Safety, local law enforcement agencies

### Supporting Comments from Work Group Members

1.	<p>Marijuana testing laboratories receive calls on a regular basis from members of the public requesting to test samples of marijuana and edible marijuana products, but must decline these requests because the current marijuana rules prohibit licensed labs from receiving samples from outside METRC. As such, it is not easy for a parent or teacher to positively confirm if a product found in the possession of a child contains marijuana. Home test kits have recently become available, but their capabilities are limited and their accuracy questionable.</p> <p>HB 14-1366 intended to ensure that people are able to readily identify edible marijuana products. Allowing people to access laboratories to test products for marijuana content would give them an alternative means of identifying these products, independent of the decisions still to be made regarding marking products directly, and in the event that products get separated from their packaging or did not have protective packaging and labeling to begin with, such as with black market products.</p> <p>Little negative impact to the public is expected from allowing labs to test marijuana samples for the general public. The CDPHE certification process already in place will continue to ensure that labs operate with the required tracking systems to document the chain of custody and prevent tampering with samples or results. The integrity of this system will not be compromised by taking in samples from outside METRC.</p> <p>Fears about the black market accessing testing laboratories to benefit their own businesses are unfounded. Persons illegally producing and selling marijuana on the black market are primarily interested in making money quickly, and are unlikely to invest in the use of laboratories to ensure the quality of their products or the safety of consumers.</p>
2.	<p>Allowing the general public access to marijuana laboratories would increase public safety and would be good to include in the 2015 rulemaking, although it falls outside the scope of HB 14-1366.</p>

### Dissenting Comments from Work Group Members

1.	<p>Allowing non-licensees to access licensed marijuana laboratories could lead to leakage of marijuana products from METRC and to black market producers making use of laboratory services to improve and better market their products.</p>
2.	<p>This recommendation is outside the scope of HB 14-1366. However, caregivers should be brought into METRC and allowed to use laboratories for testing.</p>
3.	<p>This recommendation is outside the scope of HB 14-1366.</p>

## No. 14 - Symbol, Packaging and Labeling, Identifying Outside Packaging, Product Safety, Product Advisory Commission, and Education

Presented By: Colorado Department of Public Health and Environment

**14.1 Symbol:** Choose a universal symbol or marker for edible marijuana products that can be readily recognized by the general public. This choice should be made based on a review of scientific data, evidence-based practices, and research to include the use of focus groups, to ensure that the symbol is not inadvertently attractive to children.

**14.2 Labeling:** Review the current labeling requirements for edible retail marijuana products to ensure that they are clear and appropriate. For example, the inclusion of a nutritional fact panel on edible marijuana products may create confusion among consumers that the product is similar to traditional food.

**14.3 Identify Outside Packaging, Packaging, Product Safety:** Develop new regulations to require:

- a. A method to identify edible marijuana products outside their packaging.
- b. Child-resistant packaging.
- c. That edible marijuana products be produced, stored, and transported in a manner that keeps them free of harmful, food-borne pathogen and maintains product integrity.

**14.4 Product Advisory Commission:** Create a Marijuana Product Advisory Commission with authority to grant pre-market approval for all edible marijuana products, and to recommend policies and give guidance in regard to packaging and labeling. The Commission would be composed of a wide range of experts who would review the product, its appeal to children, and the appropriateness of the packaging and labeling before the product is marketed.

**14.5 Education:** Coordinate an education campaign that:

- a. Provides information for parents, guardians, and children to readily identify edible marijuana products by the universal symbol.
- b. Teaches the importance of safe storage of marijuana products, and particularly edible marijuana products, with messaging to include keeping these products out of sight, out of reach and locked from access by anyone under 21 years of age.
- c. Develops and disseminates marijuana educational resources for parents.



Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
2.	Strengthen Packaging and Labeling Requirements	✓
3.	Identify Edible Marijuana Products Outside their Packaging	✓
4.	Limit or Ban Categories of Edible Marijuana Products or Particular Products	✓
Other Types of Recommendation		
5.	Increase Consumer Education	✓
7.	Other – Testing Facilities and Product Safety	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
d.	Makes it clear that the product is safe for consumers.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Defensible</b>	The universal symbol for edible marijuana products will be chosen based on data, evidence-based practices, and research to include the use of focus groups.	✓
<b>Systematic</b>	Consistent and standardized regulations regarding the marking, packaging, and labeling of edible marijuana products will create a reliable system for licensees, regulators, and customers.	✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

The CDPHE is concerned about the existence of edible marijuana products on the market that so closely resemble children's candy that children are likely to be attracted to them and thereby enticed into experimenting with marijuana.

Strong packaging and labeling requirements for marijuana products, including affixing a universal symbol that is easily recognizable to the public, are intended to prevent misuse of these products by adult consumers, as well as access to them by children and youth. However, packaging and labeling alone are not sufficient to prevent unintentional ingestion. Young children often do not recognize products as dangerous from the packaging and labeling alone.

Pre-market approval of edible marijuana products will allow for greater consistency in packaging and labeling of edible marijuana products, and will help the general public to be less confused about and better able to identify these products.

A public education campaign to provide information about what edible marijuana products are on the market, how to identify them, and how to store them safely and out of the reach of children will enhance the effectiveness of the regulations and improve public safety.

These recommendations are together intended to assist with universally identifying edible marijuana products, preventing the marketing of these products to children, and preventing children and adults from unintentionally ingesting them.

### **Statutory Authority or Regulation Supporting the Regulation**

This recommendation is in alignment with the legislative declaration of HB 14-1366, which states that, “It is the intent of the Colorado General Assembly that any person engaged in the sale of retail marijuana or its derivatives shall not explicitly or implicitly market or offer for sale these products to anyone under the age of 21” and that it is further the intent of the General Assembly to “Protect people from the unintentional ingestion of edible retail marijuana products.” It is also in alignment with Article 17, section 16 of the Colorado Constitution.

### **Stakeholders Affected**

The general public would be positively impacted because they would be better able to identify edible marijuana products, and the confusion around these products would be reduced.

### **Implementing Authorities**

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment

Supporting Comments from Work Group Members	
1.	14.1-14.2: The labels on edible marijuana products need to be reevaluated. There are several pieces of information that do not add value to the label and should be removed, because they detract from the most important information that needs to stand out. A few things need to be added, including an updated universal symbol and a graphic symbol showing or telling consumers to store this product in its original packaging out of the sight and reach of children.
2.	14.2: One instance of agreement was registered without comment for sub-recommendation 14.2 regarding the need to review and improve the current labeling requirements for edible marijuana products.
3.	14.3(a): Public and consumer safety should be the number one priority of marijuana manufacturers, retailers, testing facilities, advocacy groups, regulators, the MED, and lawmakers. Marking edible marijuana products promotes public and consumer safety.
4.	14.3(b): One instance of agreement was registered without comment for sub-recommendation 14.3(b) regarding child-proof packaging.
5.	14.3(b): Child-resistant packaging should be mandatory for all edible marijuana products in order to reduce the likelihood of accidental ingestion. This is already scheduled to take effect on February 1, 2015.
6.	14.3(c): One instance of agreement was registered without comment for sub-recommendation 14.3(c) regarding ensuring that products are produced, stored and transported in a way that reduces pathogens and maintains product integrity.
7.	14.4: One instance of support was registered for sub-recommendation 14.4 in its entirety, regarding creation of the Product Advisory Committee.
8.	14.4: There should be continued dialogue amongst stakeholders to determine whether the proposed Marijuana Product Advisory Commission would provide benefits for consumer safety and public health. Whether or not this Commission moves forward as proposed, the state should consider supporting some type of ongoing evaluation mechanism for responding to issues that may arise in the future related to edible marijuana products.
9.	14.4: An advisory commission should be put into place that would approve the packaging and labeling of products, as it would give the consumer a consistent message on every package and ensure that rules are being followed. However, giving this commission authority to ban an edible marijuana product is unnecessary and possibly unlawful. The CDPHE already has the authority to prohibit the sale of any product that is proven to be harmful to the general public. It must be determined how this commission is funded.
10.	14.4: An Advisory Commission as suggested in this recommendation would be a great addition to the approval process for packaging and labeling decisions. However, when it comes to approving or denying products, the Commission could become overreaching and ban too many products from the market. Eliminating products from the licensed market would drive consumers to the black market, where products are not tested, have unknown potency, and are not easily separated into 10mg or less servings. If the intent is to reduce accidental ingestion, the focus must be on safe packaging, labeling, and storage.
11.	14.5: Two instances of agreement were registered without comment for sub-recommendation 14.5 regarding a proposed educational campaign.

### Supporting Comments from Work Group Members

12.	14.5: Education must be a cornerstone of any future regulations, to assist consumers to know how to use and store edible marijuana products in accordance with Colorado laws and regulations. This education must be simple and clear, focusing on the most important messages, including (1) that edible marijuana products are for the use of persons 21 and over, (2) that they must be stored safely and kept out of the reach of persons under 21, and (3) the consequences of breaking the laws and regulations.
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### Dissenting Comments from Work Group Members

1.	<p>14.1, 14.3: Insufficient public health analysis has been presented to assess possible negative impacts attributable to edible marijuana products in the regulated market, to support the recommendation that these products should be marked to be recognizable outside their packaging. Moreover, marking edible marijuana products is not feasible, as demonstrated in the Rationale section of Recommendation 11. Representatives from CDPHE and Children's Hospital Colorado noted in their presentations to the Work Group that child-proof packaging and keeping products out of the reach of children have proven effective means of preventing accidental ingestions by children.</p> <p>14.4: No evidence has been cited to show that edible marijuana products have been marketed to children, to support the recommendation to create a Product Advisory Commission to review products' appeal to children before they can be marketed. Moreover, marketing these products to children is already prohibited by Colorado laws and regulations.</p> <p>14.5: Amendment 64 created a framework for establishing a retail marijuana market in Colorado, with the Department of Revenue as the designated regulator of this industry. The Amendment contains no provisions for creating a Product Advisory Commission such as is proposed in this recommendation, which would have a regulatory role that would include banning edible marijuana products.</p>
2.	14.3(a): More data is needed before mandating any regulations regarding methods to identify edible marijuana products outside their packaging.
3.	14.3(b): Child-resistant packaging is already required for all edible marijuana products and marijuana establishments must be in compliance by February 1, 2015.
4.	14.4: Edible marijuana products are not marketed to children, just as sweet alcoholic drinks such as Pina Coladas, daiquiris and "jello shots" are not. Amendment 64 allows for the legal sale of edible marijuana products, and as such, a Product Advisory Committee should not be given the authority to grant or deny approval to these products.
5.	14.4: An advisory commission should be put into place that would approve the packaging and labeling of products, as it would give the consumer a consistent message on every package and ensure that rules are being followed. However, giving this commission authority to ban an edible marijuana product is unnecessary and possibly unlawful. The CDPHE already has the authority to prohibit the sale of any product that is proven to be harmful to the general public. It must be determined how this commission is funded.

**Dissenting Comments from Work Group Members**

- |    |   |
|----|---|
| 6. | 14.4: An Advisory Commission as suggested in this recommendation would be a great addition to the approval process for packaging and labeling decisions. However, when it comes to approving or denying products, the Commission could become overreaching and ban too many products from the market. Eliminating products from the licensed market would drive consumers to the black market, where products are not tested, have unknown potency, and are not easily separated into 10mg or less servings. If the intent is to reduce accidental ingestion, the focus must be on safe packaging, labeling, and storage. |
| 7. | 14.5(c): Edible marijuana products manufacturing facilities are already required to secure approval from the health department, their staff are certified in ServSafe food-handling techniques, and all edible marijuana products are tested in licensed laboratories. As such, this recommendation is already covered by existing rules.   |

## **No. 15 - Imprinting Edible Marijuana Products with a Universal Symbol or Color and Prohibiting Products that Cannot be Imprinted or Colored**

**Presented By: Law Enforcement**

- 15.1** *Imprint all edible marijuana products with a universally recognized symbol or unique color to indicate that they contain marijuana.*
- 15.2** *Prohibit the manufacture and sale any edible marijuana product that does not lend itself to imprinting with the universally recognized symbol or unique color, given that these products cannot be rendered immediately identifiable as containing marijuana.*
- 15.3** *Promulgate rules related to imprinting edible marijuana products and require that the Marijuana Enforcement Division certify each imprinting method to be allowed.*

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
3.	Identify Edible Marijuana Products Outside their Packaging	✓
4.	Limit or Ban Categories of Edible Marijuana Products or Particular Products	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making		
The Guiding Principles were not applied in this recommendation.		

### **Rationale for the Recommendation and Issues it is Expected to Resolve**

With the increasing popularity of edible marijuana products in Colorado, there is an inherent public safety risk in continuing to allow the production and distribution of marijuana products that closely resemble commonly consumed foods that do not contain marijuana, due to the likelihood of accidental or unintentional ingestion of edible marijuana products.

The first priority in this issue should be protecting public safety. Protecting people against accidental or unintentional ingestion of marijuana must override the concerns of marijuana industry members about the increased cost and reduced productivity they would face if required to imprint their products with a universally recognized symbol or color. Recommendation 3 and Appendix J present in detail how to mark each category of edible marijuana product currently being manufactured and sold in Colorado.

This recommendation balances the public safety concerns with the concerns of marijuana industry members by continuing to allow the manufacture and sale of edible marijuana products that can be imprinted with the universal symbol or color, and prohibiting those products that cannot be imprinted or colored.

### **Statutory Authority or Regulation Supporting the Regulation**

The legislative declaration of HB 14-1366 states that it is the intent of the Colorado General Assembly to “(a) Protect people from the unintentional ingestion of edible retail marijuana products; and (b) Ensure that edible retail marijuana products are readily identifiable by the general public.”

### **Stakeholders Affected**

The general public will be less likely to confuse edible marijuana products with foods not containing marijuana, and less likely to accidentally or unintentionally ingest edible marijuana products because these products will be readily identifiable even if found outside their packaging.

### **Implementing Authorities**

Colorado General Assembly, Colorado Department of Revenue

<b>Supporting Comments from Work Group Members</b>	
1.	<p>Public and consumer safety should be the number one priority of marijuana manufacturers, retailers, testing facilities, advocacy groups, regulators, the MED, and lawmakers. Marking edible marijuana products promotes public and consumer safety.</p> <p>A set of methods for marking edible marijuana products is described in Appendix N, based on the advice of a food product development expert with 44 years of experience in the food industry, where customer safety is a primary consideration. All methods are capable of being done and will be effective for applying a symbol to edible marijuana products, while the costs to manufacturers are not overly burdensome. Edible marijuana products currently on the market are already being marked using these methods.</p>

Dissenting Comments from Work Group Members	
1.	<p>The only practical way to imprint all edible marijuana products with a universal symbol is to print the symbol on product labels. Prohibiting foods that cannot be imprinted is outside the scope of HB 14-1366 and not in alignment with Amendment 64.</p> <p>This recommendation does not strike a balance between public safety concerns and the concerns of marijuana industry members, because requiring marijuana manufacturers to imprint edible marijuana products will be very destructive to the marijuana industry. Child-resistant packaging, labeling and education are better approaches to protecting public safety.</p> <p>There is not yet sufficient data to prove that edible marijuana cause public health concerns. No one has ever died from using marijuana, and the number of cases of over-ingestion is very low relative to the huge number of products on the market.</p>
2.	<p>Even if a system could be devised to readily identify products when outside their packaging, the markings could readily be removed or disguised by someone wanting to hide the identity of the product. Law enforcement agencies have ready access to testing facilities to determine whether an unknown product contains marijuana, whether it is marked or not.</p> <p>Banning products is likely to lead to an increase in black market production, where identification of products is even more difficult, tracking production is impossible, and there are no quality control standards to protect consumers.</p>
3.	<p>No data has been collected to prove that imprinting edible marijuana products would help prevent accidental ingestion. Moreover, there is currently no funding available to marijuana products manufacturers to purchase the NSF International-certified commercial equipment that would be needed to imprint on edible products. As such, this recommendation is not practicable.</p> <p>Prohibiting edible marijuana products falls outside the scope of HB-14-1366 and does not take into consideration the needs of the community.</p> <p>Serving consumers will be much more difficult if bulk and other items that cannot be imprinted are prohibited. Smell could be used as a means of identifying bulk marijuana products outside their packaging. Many bulk edible marijuana products are currently manufactured without sugar and are not appealing to children at all.</p>



## No. 16 - Packaging and Labeling, Marking Products, Limiting Products, Data Analysis, and Education

Presented By: Colorado Alliance for Drug Endangered Children

- 16.1 Child-Resistant Packaging: Ensure that requirements on child-resistant packaging for edible marijuana products are adequate. Consider a requirement that each 10mg single serving is in its own child-resistant packaging. Consider legal repercussions for removing a product from its child-resistant packaging other than at the time of use.
- 16.2 Review Labeling Requirements: Update the standardized symbol to clearly indicate that the product contains marijuana. Review the current requirements and include language that directs the consumer to keep the product in its original packaging and store the product locked and out of reach from children.
- 16.3 Mark Individual Products: Individually mark products through molding/shaping, stamping/imprinting, or airbrushing/stenciling them to include the standardized symbol indicating the presence of marijuana in the product. Hard candies, soft candies, chocolate bars, pills, and capsules should all be marked.
- 16.4 Limit Products: Consider placing limitations on which edible marijuana products can be manufactured and sold, with particular attention on limiting those that are made to be very similar to, or even identical to popular candies. The manufacture of these products may also constitute trademark infringements.
- 16.5 Educate Parents: Educate parents on the safe storage of edible marijuana products, namely locked up and in their original child-resistant packaging. Provide parents with tools to educate their children about edible marijuana products and other legal and illegal substances.
- 16.6 Data Analysis: Collect and report data on the consumption of edible marijuana products, including over-consumption, unintentional ingestion, and illegal possession and consumption by youth. Consider the following possible resources for collecting data: first responders, law enforcement officers, school resource officers, hospitals, poison control centers, departments of public health, and departments of human services.

Recommendation Categories		
Strategic Options for Rendering Edible Marijuana Products Identifiable		
2.	Strengthen Packaging and Labeling Requirements	✓
3.	Identify Edible Marijuana Products Outside their Packaging	✓
4.	Limit or Ban Categories of Edible Marijuana Products or Particular Products	✓
Other Types of Recommendation		
5.	Increase Consumer Education	✓
6.	Improve Data Collection and Analysis	✓

Elements of House Bill 14-1366 to which the Recommendation Applies		
a.	Protect people from the unintentional ingestion of edible retail marijuana products.	✓
b.	Ensure that edible retail marijuana products are readily identifiable by the general public.	✓
c.	Makes it clear that the product is not for consumption by children.	✓
e.	Utilize a universal symbol.	✓

Application of MED Guiding Principles for Rule-Making		
<b>Defensible</b>	This recommendation will increase child safety in relation to edible marijuana products.	✓
<b>Operable</b>	This recommendation is very broad, so portions of it are more operable than others. For example, packaging and labeling are easier to implement than marking and limiting products.	✓
<b>Transparent</b>	This recommendation aims to increase standardization in the regulation of edible marijuana products.	✓
<b>Systematic</b>		✓

### Rationale for the Recommendation and Issues it is Expected to Resolve

From the discussions of the HB 14-1366 Work Group and a review of the available data, it is clear that preventing unintentional ingestion of edible marijuana products by children and youth requires a multi-pronged approach. This recommendation provides such an approach, encompassing a variety of methods for identifying edible marijuana products and providing support for the regulations, with a primary focus on preventing the unintentional ingestion of edible marijuana products by children.

### Statutory Authority or Regulation Supporting the Regulation

This recommendation aligns with the retail marijuana public education campaign being undertaken by the CDPHE, and with the marijuana data collection requirements being managed by the Division of Criminal Justice.

### Stakeholders Affected

Children will be better protected from unintentional ingestion of edible marijuana products.

### Implementing Authorities

Colorado General Assembly, Colorado Department of Revenue, Colorado Department of Public Health and Environment, Colorado Department of Human Services, local law enforcement agencies, school resource officers, hospitals, poison control centers

Supporting Comments from Work Group Members	
1.	One instance of support was registered without comment for this recommendation in its entirety.
2.	One instance of support was registered for this recommendation in its entirety, with particular support for sub-recommendation 16.3 regarding marking products via stamping or imprinting the approved symbol on hard candies, soft candies, chocolate bars, pills, and capsules.
3.	One instance of support was registered for all parts of this recommendation except for sub-recommendation 16.3 regarding marking individual products and sub-recommendation 16.4 regarding limiting products that resemble popular candies.
4.	16.1: Child-resistant packaging should be mandatory for all edible marijuana products in order to reduce the likelihood of accidental ingestion. This is already scheduled to take effect on February 1, 2015.
5.	16.2: Updating the standardized symbol is essential, and labeling requirements should be reviewed regularly to ensure public safety.
6.	16.2: The labels on edible marijuana products need to be reevaluated. There are several pieces of information that do not add value to the label and should be removed, because they detract from the most important information that needs to stand out. A few things need to be added, including an updated universal symbol and a graphic symbol showing or telling consumers to store this product in its original packaging out of the sight and reach of children.
7.	16.3: Public and consumer safety should be the number one priority of marijuana manufacturers, retailers, testing facilities, advocacy groups, regulators, the MED, and lawmakers. Marking edible marijuana products promotes public and consumer safety.  A set of methods for marking edible marijuana products is described in Appendix N, based on the advice of a food product development expert with 44 years of experience in the food industry, where customer safety is a primary consideration. All methods are capable of being done and will be effective for applying a symbol to edible marijuana products, while the costs to manufacturers are not overly burdensome. Edible marijuana products currently on the market are already being marked using these methods.
8.	16.5: Education must be a cornerstone of any future regulations, to assist consumers to know how to use and store edible marijuana products in accordance with Colorado laws and regulations. This education must be simple and clear, focusing on the most important messages, including (1) that edible marijuana products are for the use of persons 21 and over, (2) that they must be stored safely and kept out of the reach of persons under 21, and (3) the consequences of breaking the laws and regulations.
9.	16.5 and 16.6: One instance of support was registered without comment for sub-recommendations 16.5 related to educating parents and 16.6 related to data analysis.

### Supporting Comments from Work Group Members

10.	16.6: There is a significant need for reliable data on accidental ingestions. Most of the information referenced in the Work Group was anecdotal and much of the risk is still unknown. Several important pieces of data are needed, such as: if the product was from a legal, regulated vendor or from a black market supplier; if it was stored properly or left in an accessible place; if the potency was tested prior to consumption; and if the intended consumer understood how much he or she was consuming. This data must be available in order to craft solutions that will actually address the problems rather than heading down a path that, at best, might not fix the problem, and, at worst, could potentially compound the problems with new and unintended consequences.
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### Dissenting Comments from Work Group Members

1.	16.1: Child-resistant packaging requirements are already in place.
2.	16.3: Data must be collected to prove that the added expense of marking individual products is necessary.
3.	16.3- 16.4: Marking individual edible marijuana products is not practical and should not be required, nor should there be limitations on which products can be manufactured and sold.
4.	16.3- 16.4: Marking cannot be effectively implemented, as has been documented in the Rationale section of Recommendation 11. Limiting products that resemble popular candies may not be constitutional. Moreover, it would be difficult to determine which items are more problematic than others in terms of resembling popular candies, to justify limiting them.
5.	16.3-16.4: As soon as we start to suggest that some products should be marked while others should be limited or banned, the process may get out of hand and too many products may be banned from the market. Eliminating products from the licensed market would drive consumers to the black market, where products are not tested, have unknown potency, and are not easily separated into 10mg or less servings. If the intent is to reduce accidental ingestion, the focus must be on safe packaging, labeling, and storage.
5.	16.4: Limiting edible marijuana products falls outside the scope of HB 14-1366.

## Public Comments

Following are summaries of all the public comments submitted in writing to the MED for the consideration of the General Assembly, the State Licensing Authority, and the HB 14-1366 Work Group when implementing the various aspects of HB 14-1366.

The comments are sorted below into the four strategic options for identifying edible marijuana products, with an additional set of comments pertaining to identifying edible retail marijuana products generally that do not fall within one of these four options. Comments are also sorted into the three additional categories falling outside the scope of HB 14-1366. Finally, a number of comments are included that are not specific to any of these seven categories. The full text of all public comments submitted in writing to the MED is maintained as part of the written record for the work group process, which is made available to the public upon request.

Supporting and dissenting comments are presented separately below, with the vast majority of comments being supportive of some action or a particular aspect of implementing HB 14-1366. Dissenting comments were received in only two categories, which are the same two that also received the most supporting comments:

Strategic Option 3 - Identify Edible Marijuana Products Outside their Packaging - received the largest number of public comments, 67, of which 43 comments were slight variations of a standard template message sent in by various members of the public. It also received four dissenting comments.

Category 4 - Limit or Ban Categories of Edible Marijuana Products or Particular Products – received 39 supporting comments and four dissenting comments.

Most public comments were not specific to a particular recommendation of the Work Group, but whenever a comment specifically mentioned or responded to one of these recommendations, the recommendation number is included in the tables below.

No.	Rec. No.	Identify Marijuana Products Generally - Supporting Comments
1	N/A	Edible marijuana products should be clearly identified as containing marijuana, and divided into clearly marked serving portion sizes with limited amounts of marijuana per serving.
2	N/A	Marijuana is being sprayed, injected, and infused into almost any food imaginable, yet people have no way to know which products contain marijuana and which do not. It must be ensured that every edible marijuana product that may be sold can be identified and distinguished from non-marijuana products.
3	N/A	Edible marijuana products should be distinguishable from regular food items because Colorado residents have the right to know if marijuana is present in the foods they consume.
4	N/A	It is critically important for children's safety that edible marijuana products such as candy and sodas, which they may mistake for products not containing marijuana, be properly identifiable for children of all ages.

No.	Rec. No.	1. Take No Action at this Time to Identify Edible Marijuana Products - Supporting Comments
1	7	There is very good evidence now to show that the current rules are effective, as there have not been any reported accidental ingestions for many months. It takes time to collect a cohesive set of data.

No.	Rec. No.	2. Strengthen Packaging and Labeling Requirements – Supporting Comments
1	1, 3, 4, 5, 6, 8, 9, 11	The labeling requirements indicated in Recommendation 1 are already in place, except for the universal symbol. Symbols are commonly used to identify many types of food and to indicate that it has been inspected and regulated; they are shown on the food's packaging. Because customers are accustomed to using symbols, the use of a universal symbol for a food containing marijuana is likely to be helpful in reducing accidental ingestion by anyone. Packaging and labeling are necessary for edible marijuana products and are effective ways to protect consumers and public safety, as evidenced in other industries that manufacture various types of ingestible products. The current requirements for packaging and labeling edible marijuana products are working to protect public safety. They are the only practical choice. A warning label to advise customers to keep the food in the package until consumed is advisable, and consistent with practices used for other products. For the label to be effective in protecting public safety, it must be relevant and easy to read.
2	N/A	Edible marijuana products must be labeled appropriately in order to be regulated like alcohol, and should not be named with any word or reference to an existing candy, dessert, or food that is common and attractive to children. Packaging should be opaque and a new labeling standard is needed that is not friendly to kids and states clearly that these products are for adults only.
3	N/A	Edible marijuana products should be labeled on individual servings, not only on bulk packages.
4	N/A	All edible marijuana products as well as any other method of ingesting marijuana should be clearly labeled. Marijuana affects one's brain, shrinking the frontal portion, impairing the person, and sapping motivation and clear thinking. It is not good for our economy and there are concerns about drinking alcohol and taking marijuana simultaneously.
5	N/A	When regulating marijuana like alcohol, packaging matters and it is important to have packaging that is not kid-friendly. There should be no see-through packaging, no candy-like names for the products, no cartoons, and there should be a warning label.
6	N/A	Labeling edible marijuana products is a necessity, because of the risk of people, especially young people through college age, consuming them without recognizing the danger to which they are exposing themselves. The onset of the chemical THC is not as prompt in an edible as when it is inhaled, leading to consuming more and having a delayed effect, and it is more difficult to manage the dose when orally administered. No comprehensive evaluation has been conducted to consider individual variability in absorbing and distributing THC as has been done for medications. The amount of active THC must be clearly displayed on labels, as well as appropriate cautions, despite complaints from manufacturers or retailers about the inconvenience or cost.

No.	Rec. No.	3. Identify Edible Marijuana Products Outside their Packaging - Supporting Comments
1-43*	N/A	It is imperative for all Colorado residents, especially children and teenagers, to be able to identify if a product, once out of its packaging, contains marijuana. The benefits of requiring this far outweigh the minimal costs to manufacturers and those making profits in this industry. <b>*NB: This standardized message was received with slight variations by 43 people.</b>
44	N/A	Edible marijuana products should be distinguished from regular food items outside their packaging. The main concern is for children who may mistakenly eat one of these products thinking it is a food they would normally eat.
45	N/A	A symbol of the marijuana should be put on all edible marijuana products as a condition for their being manufactured and sold.
46	N/A	Edible marijuana products should be clearly marked or otherwise identified outside the packaging so that children and youth will not confuse them with common treats.
47	N/A	All edible marijuana products should be marked on the products themselves as well as labeled. As these products proliferate in Colorado, we must be able to identify for ourselves and our children which products contain marijuana, since it is impossible to differentiate edible marijuana products in the form of baked goods and candies from the same products not containing marijuana once they are outside their packaging. It may cost the manufacturers a little more, but the value in lives saved is far greater than the costs to be incurred by manufacturers. The state should not be manipulated or intimidated by the marijuana industry, which is making good profits.
48	N/A	Edible marijuana products should be made clearly identifiable outside their packaging, in order to protect youth and wisely implement retail marijuana. The objection that alcohol is not held to the same standard is not valid because alcohol has a recognizable smell and taste.
49	N/A	Edible marijuana products should be marked on the products themselves so that there is no mistaking them when taken from their packaging, in addition to having full disclosure of the ingredients on the labels, as for other food items. It is unconscionable that someone could ingest something without their full knowledge of what the item is and what could occur as a result of ingesting it.
50	N/A	Edible marijuana products should be made clearly identifiable outside their packaging, due to the dangers to children from accidental ingestion and the significant increase in child poisonings that has already taken place in Colorado from ingestion of these products.
51	N/A	Edible marijuana products should be identifiable outside their packaging, in order to alert consumers that these products contain marijuana and help them to avoid mistaking these products for regular, sugary treats. People also need to know how much marijuana is within an edible product and that the products have a delayed absorption rate, to avoid using more than intended. Children need to know about the negative cognitive impacts these products could have, as well as the negative impact on athletic performance. People have the right to know what they are ingesting.
52	N/A	Edible marijuana products should be identifiable outside their packaging. All Colorado residents, especially teenagers and children, should be able to know when a food, candy, or drink contains marijuana, once these products are outside the packaging.
53	N/A	The residents of Colorado have a right to know when marijuana is in food and drinks when these products are outside their packaging.



No.	Rec. No.	3. Identify Edible Marijuana Products Outside their Packaging - Supporting Comments
54	N/A	If a ban of all edible marijuana products is not possible, every edible product outside of its original packaging should be clearly identified as containing marijuana. This identification must be more than determining which color in these products will not be attractive to children. Colorado residents and especially youth need to know when marijuana is in food or drinks by making these products clearly identifiable from normal foods outside their packaging. The benefits of requiring this identification far outweigh the minimal costs to manufacturers and business owners in this industry.
55	N/A	All Coloradans should be able to identify whether a product contains marijuana once outside its packaging. Failure to do so exposes our children, employees, and businesses to unacceptable risk.
56	N/A	Edible marijuana products should be easily identifiable outside their original packaging. Any type of edible marijuana product can be identified using rice paper wrapping, which can be imprinted with red marijuana leaf warning logos and sales batch numbers linked to the MED database of manufacturers. This wrapping is edible, odorless, tasteless, water-soluble, and gluten-free. The wrappings should be procured through a state-sanctioned website in order to produce the sheets with batch numbers corresponding to the manufacturer procuring them.
57	N/A	Edible marijuana products should be distinguishable from regular food items when outside their packaging so that Colorado residents, and especially teens, can know if marijuana is present in the foods they consume.
58	N/A	Edible marijuana products should be distinguishable from regular food items outside their packaging, because Colorado residents have a right to know if marijuana is present in the food they consume.
59	N/A	It is vital that HB 14-1366 be implemented and enforced in a manner consistent with the spirit and letter of the law, and that edible marijuana products be easily identifiable both prior to and following removal from their packaging. These products can be very dangerous when the user is unaware that they contain marijuana. Because the vast majority of edible marijuana products are intentionally made to copy the non-marijuana product, adults and children are both at risk once the product has been removed from its packaging, and they must be protected. Marijuana is a drug and must be easily identifiable, like any other drug.
60	N/A	Edible marijuana products should be distinguishable from regular food items outside their packaging, because Colorado residents have the right to know if marijuana is present in the food they consume. It is in the interest of children to prevent the devastating effects that await them in their twenties and thirties by destroying their brain cells through the ingestion of marijuana during the early years of their brain development.
61	N/A	All edible marijuana products should be marked outside their packaging. Allowing these products on the market without clearly identifying them is a serious health risk, especially for unknowing recipients. Marijuana is already very accessible and is having impacts on school students, and there have been cases where both children and adults were injured by unknowingly consuming these products. Colorado residents have the right to know if marijuana is present in their food. Exceptions pose a risk as they can be confused by consumers, since marijuana manufacturers have gone out of their way to market and package these products so they look like common candies and other foods. We require other drugs to be clearly identified and it should be the same for these products.

No.	Rec. No.	3. Identify Edible Marijuana Products Outside their Packaging - Supporting Comments
62	N/A	Edible marijuana products should be clearly identifiable once outside their packaging. Everyone has a right to know what products contain marijuana, and the marijuana industry should be required to disclose the contents. Labels should indicate the contents.
63	N/A	Edible marijuana products should be properly labeled both inside the packaging (on the product itself) and outside the packaging. This will allow individuals to make a choice about using marijuana and to avoid the risk of being given it unintentionally by someone else, and will allow parents to properly supervise their children. Teenagers often make poor choices that can involve maliciously tricking someone into ingesting marijuana. This behavior has been observed by teachers. The consequences of adolescents using marijuana are devastating. Their brains are not equipped to handle it and are prone to addiction, and marijuana has been proven to interfere with learning and decrease motivation for academic achievement. Therefore we should not make it easier for teens to unknowingly be given marijuana through unmarked products. Profitability of the marijuana industry should not be put ahead of the health of adolescents in Colorado.
64	N/A	Edible marijuana products should be distinguishable from regular food items outside their packaging, because Coloradans have the right to know if marijuana is present in the foods they consume. Children should be protected from this unnecessary market that is attracting them. Marijuana was legalized before it had the rules to govern it, so rules need to go into place now to stop the marijuana industry from getting wealthy at the expense of children in Colorado.
65	N/A	All edible marijuana products should be distinguishable from regular food items outside their packaging, just as prescription drugs are marked outside their packaging. Children and parents have the right to know if marijuana is present in the food they consume, and to not be deceived into consuming it. Legalizing marijuana in Colorado was shortsighted without safeguards in place to protect innocent consumers, so this is lawmakers' opportunity to put corrective and protective measures in place before more lives are negatively impacted by unknown and unwanted consumption of marijuana.
66	N/A	Edible marijuana products, particularly candy and sweets, should be clearly marked so the user will know it contains marijuana even when the wrapper is removed.
67	N/A	The best solution is to ban all edible marijuana products, but if that is not possible, the marijuana industry should label packages and products so that there is no question about what is being eaten. Only one dose should be in each packaged item. Each package should be labeled with the measured dosage within the package. A general warning label should be on every product package as required on all alcohol and tobacco products. Alcohol only comes in one form, tobacco comes in only three, but edible marijuana products come in hundreds of forms, such that regulations on these products must be very restrictive to protect consumers. The marijuana industry is, or will be soon, a billion-dollar industry, so it does not make sense to ask industry members to make the rules. The regulative boards and agencies need to put firm rules and regulations in place along with specific enforcement policies. It will be easier and less impactful to lessen the restrictions later if there are no dire consequences to legalized marijuana in the future.

No.	Rec. No.	3. Identify Edible Marijuana Products Outside their Packaging - Dissenting Comments
1	1, 3, 4, 15, 16	Imprinting, stamping, and shaping many different foods and beverages containing marijuana is impossible, impractical, and not enforceable. A shape or imprint on most foods is easily destroyed. Foods and beverages containing alcohol are also not easily recognized outside their packaging. Symbols are commonly used to identify many types of food and to indicate that it has been inspected and regulated; they are shown on the food's packaging. Because customers are accustomed to using symbols, the use of a universal symbol for a food containing marijuana is likely to be helpful in reducing accidental ingestion by anyone. Packaging and labeling are necessary for edible marijuana products and are effective ways to protect consumers and public safety, as evidenced in other industries that manufacture various types of ingestible products. The current requirements for packaging and labeling edible marijuana products are working to protect public safety. They are the only practical choice.
2	N/A	Packaging edible marijuana products and making them clearly identifiable outside the package is a daunting task for an already heavily taxed and regulated industry, and it does not offer further safety. The burden of keeping these products away from children or people who should not consume them lies with the person who purchased them rather than the state, just as it is for alcohol. Moreover, alcoholic beverages are not distinguished outside their packaging. It is important to keep marijuana and the profits gained from selling it within legitimate businesses and away from the black market.
3	N/A	Requiring that edible marijuana products be clearly labeled outside their packaging is another attempt to undermine Amendment 64, which clearly indicated that marijuana should be regulated like alcohol. It would also make unjust and unnecessary demands on marijuana manufacturers. It is reasonable to require the outside packaging to be clearly labeled, just like alcohol and tobacco. An alcohol-infused candy is not required to be stamped in any way, nor should this be the case for candies made with marijuana. Because Amendment 64 was about recreational marijuana, the arguments made about how there is no need for edible marijuana products in Colorado are irrelevant. No one needs the wide variety of alcoholic beverages and products either.
4	N/A	The best solution is to ban all edible marijuana products, but if that is not possible, the marijuana industry should label packages and products so that there is no question about what is being eaten. Only one dose should be in each packaged item. Each package should be labeled with the measured dosage within the package. A general warning label should be on every product package as required on all alcohol and tobacco products. Alcohol only comes in one form, tobacco comes in only three, but edible marijuana products come in hundreds of forms, such that regulations on these products must be very restrictive to protect consumers. The marijuana industry is, or will be soon, a billion-dollar industry, so it does not make sense to ask industry members to make the rules. The regulative boards and agencies need to put firm rules and regulations in place along with specific enforcement policies. It will be easier and less impactful to lessen the restrictions later if there are no dire consequences to legalized marijuana in the future.

No.	Rec. No.	4. Limit or Ban Categories of Edible Marijuana Products or Particular Products - Supporting Comments
1	3	This is to support Smart Colorado's recommendation, which proposes a variety of options for applying a symbol to edible marijuana products so they can more easily be identified. Following the adoption of child-resistant packaging requirements for retail and medical marijuana, it has become evident that there is a need to protect adolescents from unintentional ingestion of edible marijuana products. This recommendation is necessary to protect children and adolescents from unintended exposure to these products, and it is reasonable and not unduly burdensome on the marijuana industry. It balances the interests of the marijuana industry with the protection of children.
2	10	All forms of edible marijuana products should be banned except for lozenges and tinctures. Amendment 64 promised that regulating marijuana would protect children and keep it out of their hands, yet we now have a billion-dollar, for-profit industry making extremely potent products, targeting children with products that can be discreetly consumed or hidden, and sending the message that using marijuana is not harmful and is an acceptable form of recreation. The over-commercialization of the marijuana by the marijuana industry is a major concern that must be addressed, given its reckless disregard for child and adolescent health and wellbeing. By putting marijuana into anything and everything and irresponsibly referring to it as medical and recreational, an entire generation of youth is being de-sensitized. It is important to look past the self-interest of the marijuana industry and do what is in the best interest of the community, schools, and families.
3	14	There should be a pre-market approval process before edible marijuana products can be sold commercially in Colorado, as in CDPHE's recommendation. Washington state has already implemented a similar process to prohibit edible products that are attractive to children, including normal candies that are sprayed with marijuana and re-labeled.
4	14	There should be a pre-market approval process for all edible marijuana products intended for commercial sale, as in CDPHE's recommendation.
5	14	There should be a pre-market approval process before edible marijuana products can be sold in Colorado, as in CDPHE's recommendation. This will ensure that edible marijuana products that are attractive to children may not be sold in Colorado.
6	N/A	Refusing to ban edible marijuana products places the rights and pleasures of drug users over the rights of children to be safe from accidental ingestion of these products. The marijuana industry's claims that marking these products outside their packaging is too difficult and expensive, and that accidental ingestion is not a problem are unfounded.
7	N/A	The profits being made by the marijuana industry and taxed by the state must be used to create a safer legal marijuana industry in Colorado. If a product can't be recognized as containing marijuana it should not be produced for consumption, because consumers have a right to know what is in any food available on the market.
8	N/A	Edible marijuana products should be removed from the market until there are sound ways in place to control them so that people and animals don't ingest them by mistake.
9	N/A	All edible marijuana products should be banned, because voters did not think they were approving all of these sources of marijuana when they voted to legalize the drug in 2012.
10	N/A	All edible marijuana products should be banned because the marijuana industry has no will to keep these dangerous products out of the hands of children.
11	N/A	Edible marijuana products in the form of candy should be banned, as adults who use this drug do not need to have it in this form.

No.	Rec. No.	4. Limit or Ban Categories of Edible Marijuana Products or Particular Products - Supporting Comments
12	N/A	There is no pressing need for marijuana to be in baked goods, candies, and soda. The health and safety of Colorado residents should be put before the profits of the marijuana industry, and the state should be prioritizing the prevention and reduction of marijuana use rather than promoting it.
13	N/A	The sale of edible marijuana products should be banned for the following reasons: (1) edible products produced as baked goods, candies, and sodas are poisoning children, warranting emergency room visits because these drugs look just like other snacks to children; (2) teens do not realize there is a delay in the action of the drug, which induces them to eat more, resulting in an accidental overdose, (3) teens can more easily camouflage marijuana use and trafficking at school when it looks like ordinary treats, and (4) adults who use these products have not shown themselves to be responsible consumers, resulting in accidental poisonings.
14	N/A	Edible marijuana products should be banned for the following reasons: (1) They are dangerous and can result in life-threatening overdoses in both adults and children. The colorful products look like candy or treats and appeal to young children, which can lead to poisoning, while adults may take an overdose due to the delay in achieving the desired effect. (2) They provide easy access to a drug that can cause acute and long-term, irreparable damage to the brains of youth. (3) The marijuana industry is targeting youth and realizing enormous profits, while the cost to society far exceeds any tax-related revenue. (4) Our goal must be to protect the health and safety of the citizens of Colorado, despite the demands of the marijuana industry.
15	N/A	Edible marijuana products should be banned, especially those in the form of baked goods, candies, and other products appealing to children and youth, given the health risks from accidental ingestion. Accidental overdosing has already caused both children and adults to require hospitalization.
16	N/A	Edible marijuana products should be banned to protect the health and safety of Colorado residents, especially children. Children, adolescents, and even adults are all being negatively impacted by these products.
17	N/A	Edible marijuana products should be banned, because even without verifiable data to show the negative impact of these products, common sense indicates that they are dangerous and disastrous.
18	N/A	Edible marijuana products, and particularly those in the form of baked goods and candy, should be banned because children are attracted to them and cannot distinguish them from similar products not containing marijuana. Children's Hospital Colorado has reported a sharp increase in admissions for accidental marijuana ingestion in 2014, while some people in rural Colorado have a distance to travel to reach a hospital in the event of accidental ingestion of marijuana by their children.
19	N/A	Edible marijuana products should be banned for the protection of children, because many of these products are made to look like candy and treats that children would often eat. It has been reported that nine children have been treated at local hospitals after ingesting edible marijuana products, a college student has jumped off a balcony after eating a cookie that contained marijuana, and parents are being warned to check their children's Halloween candy. All of these reasons support banning edible marijuana products.



No.	Rec. No.	4. Limit or Ban Categories of Edible Marijuana Products or Particular Products - Supporting Comments
20	N/A	Because of the impact on the brains of youth and young adults, we should not allow products designed to attract this population. Ideally, a complete ban on edible marijuana products is warranted, but at the very least there should be very strict regulations on how these products can be packaged and marketed. History has shown that regulation will always be several steps behind the industry. Anything but a complete ban will always have loopholes, leading to a number of children, youth, and families that will suffer while policy catches up. Colorado should focus on preventing and reducing, rather than promoting marijuana use. In spite of denials by the marijuana industry, marijuana baked goods, candies, and sodas are attractive to youth and there is no need for this kind of marketing.
21	N/A	The marijuana industry should not be making edibles that appeal to children such as candies and other sweets, and should therefore be restricted. Since 21 is the legal age for consuming marijuana, it is obvious that children and teens are being targeted. There is much evidence to show the negative effects on the brain of children who have used marijuana.
22	N/A	Edible marijuana products should be banned, especially those that are manufactured and packaged to be appealing to children.
23	N/A	Edible marijuana products that look like common candies usually promoted as a treat for children should be banned because they are appealing to children and are a huge health concern. Alcohol and tobacco are highly regulated, yet teenagers find ways to get them, so regulation short of banning will also not stop them from getting edible marijuana products.
24	N/A	Edible marijuana products should be banned for the following reasons: (1) Children are bombarded with marijuana use in the schools because it is so accessible, (2) increases in crime, motor vehicle accidents, deaths, and missed work, and (3) reduced interest in studying and engaging in life. The state's concerns should be about the cost of rehabilitating citizens and repairing families, and attracting businesses that do not want to sign contracts in Colorado due to impaired workers and the costs they incur, rather than about the revenue that can be generated from the sale of these products.
25	N/A	All edible marijuana products should be banned as the only way to protect the safety of children, youth and adults in Colorado. Children and youth are attracted to these products in the form of baked goods and candies, which are appealing to these age groups. Moreover, marijuana today is 4-6 times more potent than in the past and hash oil is at least 20 times more potent. The THC metabolite generated from edibles is 4-5 times more psychoactive than smoked THC, due to how the body processes ingested THC. Therefore the marijuana or hash oil found in edibles is the most dangerous form, and the dose is difficult to know or control. Recent studies have shown the grave dangers associated with the use of marijuana, including damage to memory, IQ loss, and negative impacts on motivation, mental health, school achievement, judgment, and coordination, which affects driving and work performance. A recent youth marijuana study published in Lancet Psychiatry shows that teen daily users of marijuana are more than 60% less likely to graduate from high school than other students, and more than seven times more likely to commit suicide. Since one in six teen users becomes addicted, treatment costs in Colorado will become astronomical and any short-term revenue will be offset more than tenfold in future costs due to loss of worker productivity and increased costs for emergency room visits and addiction treatment, not counting the human costs such as the inability to graduate from school and find a job.

No.	Rec. No.	4. Limit or Ban Categories of Edible Marijuana Products or Particular Products - Supporting Comments
26	N/A	All edible marijuana products should be banned because there is a great danger that children, adolescents, and adults will consume them by mistake or due to the malicious actions of others.
27	N/A	Edible marijuana products should be banned due to the harm done to youth and the state as a whole. Youth cannot recognize these products as containing marijuana, and if their parents are imbibing, children will easily get used to them, ingest them, and be harmed by them, with the damage increasing as they grow older. The state has been harmed by the proliferation of marijuana cultivation facilities and stores and is less able to attract good citizens and families to visit and live here.
28	N/A	All edible marijuana products should be banned and information should be made public regarding the increase in hospital emergency visits by children ingesting marijuana products and the number of driving violations related to marijuana intoxication.
29	N/A	Edible marijuana products that appear as baked goods, candy, and soft drinks should be banned. In spite of their claims to the contrary, the marijuana industry is targeting children and youth with these products. The marketing by the marijuana industry is outrageous and must be stopped.
30	N/A	All edible marijuana products should be banned, as the best way to ensure public safety of all Colorado residents and anyone purchasing these products. The edible portion of the marijuana industry has created a highly complicated situation that is of grave concern, especially to children and teens.
31	N/A	All edible marijuana products should be banned, in order to address the original promise of Amendment 64 to protect Colorado youth.
32	N/A	Edible marijuana products should be banned. These untested, high THC, very dangerous products are designed to addict children through advertising, which the state will not be able to stop. Photographs of marijuana edibles are appearing in color on the front pages of newspapers to encourage kids to use them, which is a violation of state law that has not been addressed.
33	N/A	All edible marijuana products should be banned because the government cannot sufficiently regulate them or protect the public from the impacts of increased addiction. The edible marijuana products industry has grown quickly, causing concern for children and adults, for whom marijuana has significant impacts. Marijuana is a gateway drug to more dangerous drugs like oxycodone, meth, and heroine. It has negative impacts on the developing brain in persons under 25, so we are gambling on the health and welfare of our children by allowing retail edible marijuana products in any form. The presence of marijuana in familiar forms like baked goods, candies, and drinks is not acceptable.
34	N/A	Colorado should implement a pre-market approval process as Washington state has done, in order to more effectively control the marijuana industry.
35	N/A	Edible marijuana products should not be produced and sold in Colorado. They are dangerous because they can be mistaken for products not containing marijuana and they lead to the use of more toxic drugs. There is no need for them.
36	N/A	The best solution is to ban all edible marijuana products, but if that is not possible, the marijuana industry should label packages and products so that there is no question about what is being eaten.

No.	Rec. No.	4. Limit or Ban Categories of Edible Marijuana Products or Particular Products - Supporting Comments
37	N/A	All edible marijuana products should be banned. There are over 250 different types of food containing marijuana and no such proliferation of products containing alcohol and tobacco. As such, there is no reason to have this many products except to attract more users who do not want the additional harmful effects of inhaling the smoke from combustion. Profits to the marijuana industry are being put before public health considerations. The industry has made its own rules and it does not want to be reigned back in for what would be in the interest of public health. However, industry members gambled when choosing to pursue this type of business.
38	N/A	Edible marijuana products, and especially those that copy popular candy and food products, should be banned. We have learned from the marketing of tobacco and alcohol products that manufacturers need to keep increasing their customer base, but we cannot allow marijuana manufacturers to continue to produce edible marijuana products that tempt younger and younger customers. Marijuana is a gateway drug and the THC content in products now has been proven to be many times stronger than in the 1970s. We should not wait 10-20 years and then try to fix the health issues that marijuana use today will cause.
39	N/A	Edible marijuana products should be banned because young children cannot distinguish them from regular food or candy, regardless of the color used to produce them. The HB 14-1366 requirement that these products be identifiable from regular food or candy does not go far enough because toddlers and young children do not recognize markings, only candy and food. Colors actually attract them and they will not know that a certain color of candy can severely harm them. Seven adults accidentally ingested hash-oil infused chocolates at the Denver County Fair in August 2014, became violently ill, and needed hospitalization. Such an incident would be even more devastating to young children. Marijuana can cause the heart rate to speed up to five times faster than normal. Recent studies from Lancet Psychiatry and Duke University have shown that teens who are persistent or daily users of marijuana permanently lose up to 8 points in IQ, are more than 60% less likely to graduate from high school, and are seven times more likely to commit suicide than teens who do not use marijuana. They also suffer from impairments in memory, reasoning, and mental and visual processing. Edible marijuana products can cause more harm than inhaled marijuana because people, and especially children and young people, often do not know the dose of THC they are ingesting and because the THC in edible products is 4-5 times more potent in the body than a similar dose inhaled, according to Dr. Mahmoud El Sohly, Director of the National Institute of Drug Abuse's Marijuana Project. Edible products can take up to 2 hours to act, so the final effect is obscured at the time of ingestion. It is unethical and unacceptable to sell edible marijuana products that look like regular products such as baked goods and commercial brands of bars, candies and spreads. All of these appeal to children who cannot tell them apart from products not containing marijuana.



No.	Rec. No.	4. Limit or Ban Categories of Edible Marijuana Products or Particular Products - Dissenting Comments
1	10	The CDPHE is taking the easy approach of prohibiting most edible retail marijuana products, rather than tackling the challenging task of regulating these products.
2	10	The recommendation to prohibit the sale of edibles except lozenges and tinctures is unconstitutional. It is sure to ignite the black market to fill the demand for edible marijuana products, which will result in unregulated edible marijuana products flooding the market that are unpackaged, unlabeled, untested, and unsafe.
3	14	An Advisory Commission as in CDPHE's recommendation should not be created, because to do so is outside the scope of HB 14-1366. The CDPHE has failed to provide any estimate of the cost of creating this commission, which would require conducting an impact study to ensure that the commission is not created without funding. Such a commission would have to be funded through the taxation of marijuana and would come at the expense of other beneficiaries of these taxes. No such commission exists in the alcoholic beverage industry, nor any tax to support such a commission for that industry. Because Amendment 64 requires that marijuana be regulated like alcohol, formation of such a commission may violate Amendment 64. Forming such a commission would also require extensive revision to the current Retail Marijuana Rules, and the rules to be developed would risk being in violation of Amendment 64, Section 16(5)(a), which prohibits the institution of regulations that would make the operation of marijuana businesses unreasonably impractical. Amendment 64 grants certain authority to the Department of Revenue, which does not include delegating this authority to another body. If such a commission were created, some of the liability for products currently held by the manufacturer would shift to the state. Finally, such a commission if established may be subject to potential criminal liability for violating federal law when approving certain marijuana products as safe for sale and not appealing to children, given that marijuana in all forms continues to be illegal under federal law.
4	14, 15, 16	A product advisory commission is outside the scope of HB 14-1366 and is not in alignment with the intentions of Amendment 64 for regulating marijuana like alcohol. Marijuana is less poisonous to the body than alcohol, yet there is no such commission for alcohol. To prohibit and limit the market because a food cannot be marked is unnecessarily overreaching. To limit a product because it looks like other products is not feasible. Foods look similar, for example all chocolate candy fits the same broad description.

No.	Rec. No.	5. Increase Consumer Education - Supporting Comments
1	2, 16	Education campaigns are necessary and useful, and the public is asking for them. They can increase public safety by alerting consumers about which marijuana edible products are from the regulated market and how to identify and purchase the safest products from licensed manufacturers, who implement the state's safety guidelines.
2	8, 11	Education is an effective way to protect consumers and public safety, as evidenced by other industries that manufacture various types of ingestible products.

No.	Rec. No.	6. Improve Data Collection and Analysis - Supporting Comments
1	7, 12, 16	Data collection and the use of evidence-based practices are necessary for public policy decisions, especially about public health and safety, but there is no way to implement evidence-based practices without evidence. Data collection should therefore be the first priority. Recommendation 12 gives useful and relevant guidelines for collecting and analyzing data. Important data to collect are where the edible marijuana products came from, how the incident happened, if the packaging was intact, if the incident was truly accidental, and other details that help people in the marijuana industry and in public safety to study what is really happening and how to prevent accidental ingestions.

No.	Rec. No.	7. Other - Testing Facilities and Product Safety - Supporting Comments
1	13	Medical marijuana caregivers and the general public should be given access to licensed marijuana testing facilities, so that concerned consumers, parents, school officials, or medical marijuana patients can have samples analyzed for cannabinoid content or microbial contamination and get reliable results.
2	13	This recommendation is outside the scope of HB 14-1366, but it would bring caregivers more in alignment with the regulated market and allow regulators to have more oversight over and better understanding of this segment of the industry.

No.	Rec. No.	General Comments
1	N/A	Marijuana should be regulated like alcohol, but the current measures seem to be designed to undermine Amendment 64.
2	N/A	Edible marijuana products are both dangerous and attractive, but are currently being handled carelessly in Colorado.
3	N/A	Marijuana is a nontoxic but psychotropic herb that provides millions of Americans with medical and recreational relief. As such, requirements for edible marijuana products should be similar to those for tobacco, alcohol, over-the counter drugs, and foods containing sugar.
4	N/A	The current system for regulating edible marijuana products is not working. Cookies and other items are creeping into our schools, causing an extra burden on teachers, yet the marijuana industry opposes regulation. Children need to be protected and the state should represent citizens rather than the marijuana industry when making decisions about how to regulate these products.
5	N/A	HB 14-1366 should be fully implemented and tax revenue should not override the need to keep dangerous and addicting drugs from children in Colorado.
6	N/A	The one-hour infomercial entitled "Pot Barons," which aired on Dish Network Channel 209 on December 1, 2014, presented information contrary to the claims made by marijuana industry representatives in the November 17, 2014 HB 14-1366 Work Group meeting that they cannot afford the proposed regulations and labeling requirements for identifying edible marijuana products. Several industry members including one who served on the Work Group reported on the successes of their businesses, which reach into the millions of dollars. The infomercial itself may be a violation of the advertising guidelines spelled out in the current Colorado statute, and industry members also noted selling products containing 200 mg of THC, which appears to be a violation of legal restrictions on the THC content per serving.

## Closing Thoughts

The MED and the Department of Revenue appreciate this opportunity to provide information to the General Assembly from a variety of stakeholders on the HB 14-1366 Work Group who have given input for possible future legislation related to edible marijuana products and for the forthcoming rule-making process related to HB 14-1366, to be completed by January 1, 2016.

Four Strategic Options for identifying edible retail marijuana products have been presented in this report for the consideration of the General Assembly, based on the range of recommendations submitted by the HB 14-1366 Work Group:

1. Take no action at this time to identify edible marijuana products, allowing time to determine if the rules effective October 30, 2014 are sufficient for the public to identify these products and prevent accidental ingestion.
2. Strengthen packaging and labeling requirements for edible marijuana products.
3. Identify edible marijuana products outside their packaging by marking, shaping or coloring all products that can be readily marked, shaped, or colored.
4. Limit or ban categories of edible marijuana products or particular edible marijuana products if they cannot be rendered clearly identifiable outside their packaging by marking, shaping, or coloring.

In order to move forward with the implementation of HB 14-1366 and with the rule-making process mandated under the bill, the Co-Chairs of the Work Group hereby request that the General Assembly consider these options and clearly indicate through legislation which of the options should be pursued at this time. The choice of options will have significant implications for the rule-making process.

Related to the choice of strategic options, the Co-Chairs also request that the General Assembly provide clarification on the following three issues, which were in contention on the Work Group given the lack of clarity of these issues in HB 14-1366 itself:

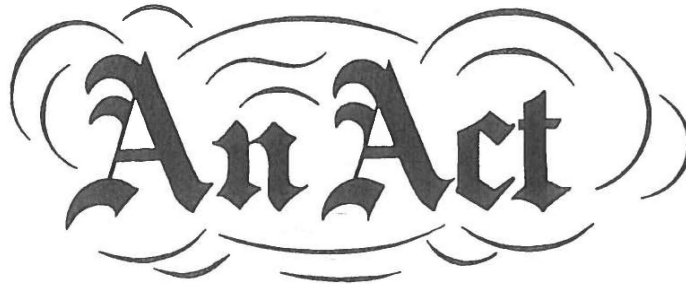
1. Whether edible marijuana products must be identifiable outside their packaging;
2. What should be done regarding those edible marijuana products that cannot be made readily identifiable outside their packaging; and
3. A clearly articulated definition of “practicable” as used in HB 14-1366 and to be used in the forthcoming rule-making process.

Finally, the Co-Chairs would like to draw attention to the extensive discussion in the Work Group about the need to simplify the labeling requirements currently outlined in statute, and

whether there might be a need for the State Licensing Authority to have greater ability to address labeling requirements in rule, in order to respond more quickly to evolving needs.

Clarification about which of the strategic options for identifying edible retail marijuana products should be pursued at this time, and about the additional issues listed above will greatly assist the MED and the Department of Revenue to proceed with the rule-making process mandated under HB 14-1366.

## Appendix A: HB 14-1366



### HOUSE BILL 14-1366

BY REPRESENTATIVE(S) Singer and McNulty, Dore, Becker, Gardner, Ginal, Lawrence, McCann, Melton, Murray, Rankin, Ryden, Stephens, Szabo, Buckner, Conti, Fields, Garcia, Gerou, Hamner, Labuda, Landgraf, Mitsch Bush, Primavera, Priola, Rosenthal, Schafer, Scott, Vigil, Wilson, Young, Exum, Hulinghorst, Kagan, Pettersen, Williams, Ferrandino; also SENATOR(S) Johnston and King, Aguilar, Crowder, Heath, Hill, Jones, Kerr, Newell, Nicholson, Rivera, Roberts, Schwartz, Todd, Zenzinger.

CONCERNING REASONABLE RESTRICTIONS ON THE SALE OF EDIBLE RETAIL MARIJUANA PRODUCTS.

*Be it enacted by the General Assembly of the State of Colorado:*

**SECTION 1. Legislative declaration.** (1) It is the intent of the Colorado General Assembly that any person engaged in sale of retail marijuana or its derivatives shall not explicitly or implicitly market or offer for sale these products to anyone under the age of 21.

(2) It is further the intent of the general assembly to:

(a) Protect people from the unintentional ingestion of edible retail marijuana products; and

Capital letters indicate new material added to existing statutes; dashes through words indicate deletions from existing statutes and such material not part of act.

(b) Ensure that edible retail marijuana products are readily identifiable by the general public.

**SECTION 2.** In Colorado Revised Statutes, 12-43.4-202, **add** (3) (c.5) as follows:

**12-43.4-202. Powers and duties of state licensing authority - rules - repeal.** (3) (c.5) (I) PURSUANT TO THE AUTHORITY GRANTED IN PARAGRAPH (b) OF SUBSECTION (2) OF THIS SECTION, ON OR BEFORE JANUARY 1, 2016, THE STATE LICENSING AUTHORITY SHALL PROMULGATE RULES REQUIRING THAT EDIBLE RETAIL MARIJUANA PRODUCTS BE CLEARLY IDENTIFIABLE, WHEN PRACTICABLE, WITH A STANDARD SYMBOL INDICATING THAT IT CONTAINS MARIJUANA AND IS NOT FOR CONSUMPTION BY CHILDREN. THE SYMBOLS PROMULGATED BY RULE OF THE STATE LICENSING AUTHORITY MUST NOT APPROPRIATE SIGNS OR SYMBOLS ASSOCIATED WITH ANOTHER COLORADO BUSINESS OR INDUSTRY.

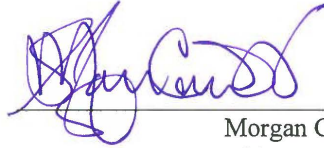
(II) ON OR BEFORE AUGUST 1, 2014, THE STATE LICENSING AUTHORITY SHALL CONVENE A STAKEHOLDERS GROUP, INCLUDING BUT NOT LIMITED TO REPRESENTATIVES OF THE DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, RETAIL MARIJUANA STORE LICENSEES, RETAIL MARIJUANA PRODUCTS MANUFACTURERS LICENSEES, CHILD ABUSE PREVENTION EXPERTS, AND ADVOCATES FOR CHILDREN'S HEALTH, TO MAKE RECOMMENDATIONS FOR RULES ON HOW EDIBLE RETAIL MARIJUANA PRODUCTS CAN BE CLEARLY IDENTIFIABLE, WHEN PRACTICABLE, TO INDICATE THAT IT CONTAINS MARIJUANA, IS NOT FOR CONSUMPTION BY CHILDREN, AND IS SAFE FOR CONSUMERS. PRIOR TO FEBRUARY 1, 2015, THE STATE LICENSING AUTHORITY SHALL REPORT ITS FINDINGS TO THE HEALTH AND HUMAN SERVICES COMMITTEE OF THE SENATE AND THE HEALTH INSURANCE & ENVIRONMENT COMMITTEE OF THE HOUSE OF REPRESENTATIVES, OR ANY SUCCESSOR COMMITTEES.

**SECTION 3. Safety clause.** The general assembly hereby finds,

determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.



Mark Ferrandino  
SPEAKER OF THE HOUSE  
OF REPRESENTATIVES



Morgan Carroll  
PRESIDENT OF  
THE SENATE



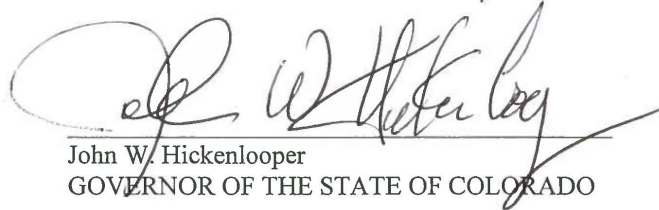
Marilyn Eddins  
CHIEF CLERK OF THE HOUSE  
OF REPRESENTATIVES



Cindi L. Markwell  
SECRETARY OF  
THE SENATE

APPROVED 9:28 am

5/21/14



John W. Hickenlooper  
GOVERNOR OF THE STATE OF COLORADO

## Appendix B: HB 14-1366 Work Group Members

Name	Organization
<b>Ron Kammerzell, Deputy Senior Director of Enforcement (Chair)</b>	Colorado Department of Revenue
<b>Lewis Koski, Director (Co-Chair)</b>	Colorado Department of Revenue, Marijuana Enforcement Division
<b>Barbara Brohl, Executive Director and State Licensing Authority</b>	Colorado Department of Revenue
<b>Donia Amick</b>	Lakewood Police Department
<b>Dr. Lalit Bajaj</b>	Children's Hospital Colorado
<b>Ian Barringer</b>	Marijuana Testing Facility
<b>Gina Carbone</b>	Smart Colorado
<b>Morgan Carr</b>	Retail Marijuana Store
<b>Douglas Darr</b>	County Sheriffs of Colorado
<b>Julie Dooley</b>	Marijuana Products Manufacturing Facility
<b>Bob Eschino</b>	Marijuana Products Manufacturing Facility
<b>Andrew Freedman</b>	Marijuana Coordination, Office of the Governor
<b>Owen Hill</b>	Colorado State Senator, District 10, Colorado Springs
<b>Ashley Kilroy</b>	Mayor's Office, City and County of Denver
<b>Andy LaFrata</b>	Marijuana Testing Facility
<b>Jeff Lawrence</b>	Colorado Department of Health and Environment
<b>Jaime Lewis</b>	Marijuana Products Manufacturing Facility
<b>Jonathan Singer</b>	Colorado State Representative, District 11, Denver
<b>Philip Snow</b>	Marijuana Cultivation Center and Products Manufacturing Facility
<b>Lindsay Topping</b>	Marijuana Products Marketing
<b>Marco Vasquez</b>	Colorado Association of Chiefs of Police
<b>John Wisler</b>	Food Manufacturing Industry
<b>Jade Woodard</b>	Colorado Alliance for Drug Endangered Children



Support Staff		
Name	Organization	Role
Dr. Lisa McCann	CS Policy	Writer of the HB 14-1366 Work Group Report
Shannon Pfeiffer	Marijuana Enforcement Division, Colorado Department of Revenue	Program Support
Corrie Martinez	Marijuana Enforcement Division, Colorado Department of Revenue	Program Support
Mia Tsuchimoto	Colorado Department of Revenue	Program Support
Wendy Spaulding	Colorado Department of Revenue	Program Support
Saskia Young	Colorado Department of Revenue	Program Support
Natriece Bryant	Colorado Department of Revenue	Program Support
Skyler McKinley	Marijuana Coordination, Office of the Governor	Program Support

## Appendix C: Work Group Meetings and Stakeholder Submission Deadlines

Date	Time	Location	Key Actions
08/01/14	09:00 AM - 12:00 PM	Colorado Division of Gaming	Presentation of MED Guiding Principles for Rule-Making, Identifying categories of marijuana edible products
09/11/14	01:30 PM - 04:30 PM	Colorado Division of Gaming	Recommendation template introduced, Matrix exercise to outline ways of identifying different categories of marijuana edible products
10/20/14	01:00 PM - 05:00 PM	Ralph I. Carr Colorado Judicial Center	Presentation and discussion of Recommendations 1-11
11/10/14	8:00 AM	N/A	Deadline for receipt of comments on Recommendations 1-11, and final deadline for additional recommendations
11/17/14	09:00 AM - 12:00 PM	Colorado Division of Gaming	Presentation and discussion of Recommendations 12-16
12/01/14	Midnight	N/A	Deadline for receipt of comments on Recommendations 1-16, Deadline for public comment

## Appendix D: 2014 Marijuana Edibles Rules

### R 103 – Definitions

“Liquid Edible Retail Marijuana Product” means an Edible Retail Marijuana Product that is a liquid beverage or food-based product and intended to be consumed orally, such as a soft drink or cooking sauce.

“Multiple-Serving Edible Retail Marijuana Product” means an Edible Retail Marijuana Product unit for sale to consumers containing more than 10mg of active THC and no more than 100mg of active THC. If the overall Edible Retail Marijuana Product unit for sale to the consumer consists of multiple pieces where each individual piece may contain less than 10mg active THC, yet in total all pieces combined within the unit for sale contain more than 10mg of active THC, then the Edible Retail Marijuana Product shall be considered a Multiple-Serving Edible Retail Marijuana Product.

“Single-Serving Edible Retail Marijuana Product” means an Edible Retail Marijuana Product unit for sale to consumers containing no more than 10mg of active THC.

“Standardized Serving Of Marijuana” means a standardized single serving of active THC. The size of a Standardized Serving Of Marijuana shall be no more than 10mg of active THC.

### Basis and Purpose – R 604

The statutory authority for this rule is found at subsections 12-43.4-202(2)(b), 12-43.4-202(3)(a)(VIII), 12-43.4-202(3)(a)(XI), 12-43.4-202(3)(a)(XII), 12-43.4-202(3)(b)(IX), 12-43.4-202(3)(c)(V), and 12-43.4-404(3), C.R.S. .C.R.S. Authority also exists in the Colorado Constitution at Article XVIII, Subsection 16(5)(a)(VII). The purpose of this rule is to establish minimum health and safety regulation for Retail Marijuana Products Manufacturing Facilities. It requires all Owners and Occupational Licensees to demonstrate an understanding of basic food handling safety practices or attend a food handler training course prior to manufacturing any Edible Retail Marijuana Product. It sets forth general standards and basic sanitary requirements for Retail Marijuana Products Manufacturing Facilities. It covers the physical premises where the products are made as well as the individuals handling the products. The State Licensing Authority intends for this rule to reduce any product contamination, which will benefit both the Licensees and consumers. The State Licensing Authority modeled this rule after those adopted by the Colorado Department of Public Health and Environment. This rule also authorizes the State Licensing Authority to require an independent consultant to conduct a health and sanitary audit of a Retail Marijuana Products Manufacturing Facility. This rule explains when a health and sanitary audit may be deemed necessary and sets forth possible consequences of a Retail Marijuana Establishment’s refusal to cooperate or pay for the audit. This rule also establishes requirements for each Edible Retail Marijuana Product manufactured by a Retail Marijuana Products Manufacturing Facility. Overall, the State Licensing Authority intends this rule to help maintain the integrity of Colorado’s Retail Marijuana businesses and the safety of the public.

**R 604 –Retail Marijuana Products Manufacturing Facility: Health and Safety Regulations****A. Training**

1. Prior to engaging in the manufacture of any Edible Retail Marijuana Product each Owner or Occupational Licensee must:
  - a. Have a currently valid ServSafe Food Handler Certificate obtained through the successful completion of an online assessment or print exam; or
  - b. Take a food safety course that includes basic food handling training and is comparable to, or is a course given by, the Colorado State University extension service or a state, county, or district public health agency, and must maintain a status of good standing in accordance with the course requirements, including attending any additional classes if necessary. Any course taken pursuant to this rule must last at least two hours and cover the following subjects:
    - i. Causes of foodborne illness, highly susceptible populations and worker illness;
    - ii. Personal hygiene and food handling practices;
    - iii. Approved sources of food;
    - iv. Potentially hazardous foods and food temperatures;
    - v. Sanitization and chemical use; and
    - vi. Emergency procedures (fire, flood, sewer backup).
2. A Retail Marijuana Products Manufacturing Facility must obtain documentation evidencing that each Owner and each Occupational Licensee has successfully completed the examination or course required by this rule and is in good standing. A copy of the documentation must be kept on file at any Licensed Premises where that Owner or Occupational Licensee is engaged in the manufacturing of an Edible Retail Marijuana Product.

**B. General Standards**

1. A Retail Marijuana Products Manufacturing Facility may be subject to inspection by the local fire department, building inspector, or code enforcement officer to confirm that no health or safety concerns are

present. The inspection could result in additional specific standards to meet local jurisdiction restrictions related to Retail Marijuana. An annual fire safety inspection may result in the required installation of fire suppression devices, or other means necessary for adequate fire safety.

2. A Retail Marijuana Products Manufacturing Facility that manufacturers edible Retail Marijuana Product shall comply with all kitchen-related health and safety standards of the relevant local jurisdiction and, to the extent applicable, with all Colorado Department of Public Health and Environment health and safety regulations applicable to retail food establishments, as set forth in 6 CCR 1010-2.

C. Product Safety

1. A Retail Marijuana Products Manufacturing Facility that manufactures Edible Retail Marijuana Product shall comply fully with paragraph C of this rule no later than February 1, 2015.
2. A Retail Marijuana Products Manufacturing Facility that manufactures Edible Retail Marijuana Product shall create and maintain standard production procedures and detailed manufacturing processes for each Edible Retail Marijuana Product it manufactures. These procedures and processes must be documented and made available on the licensed premises for inspection by the Marijuana Enforcement Division, the Colorado Department of Public Health & Environment, and local licensing authorities.
3. The size of a Standardized Serving Of Marijuana shall be no more than 10mg of active THC. A Retail Marijuana Products Manufacturing Facility that manufactures Edible Retail Marijuana Product shall determine the total number of Standardized Servings Of Marijuana for each product that it manufactures. No individual Edible Retail Marijuana Product unit for sale shall contain more than 100 milligrams of active THC.
4. The following information must be documented in the standard production procedures for each Edible Retail Marijuana Product: the amount in milligrams of Standardized Serving Of Marijuana, the total number of Standardized Servings Of Marijuana, and the total amount of active THC contained within the product.
5. Multiple-Serving Edible Retail Marijuana Product. A Retail Marijuana Products Manufacturing Facility must ensure that each single Standardized Serving Of Marijuana of a Multiple-Serving Edible Retail Marijuana Product is physically demarked in a way that enables a reasonable person to intuitively determine how much of the product constitutes a single serving of active THC. Each demarked Standardized Serving Of Marijuana must be easily separable in order

to allow an average person 21 years of age and over to physically separate, with minimal effort, individual servings of the product.

6. If an Edible Retail Marijuana Product is of the type that is impracticable to clearly demark each Standardized Serving Of Marijuana or to make each Standardized Serving Of Marijuana easily separable, then the product must contain no more than 10 mg of active THC per unit of sale, and the Retail Marijuana Products Manufacturing Facility must ensure that the product complies with subparagraph (B)(2)(a) of rule R 1004.5.

D. General Sanitary Requirements. The Licensee shall take all reasonable measures and precautions to ensure the following:

1. That any person who, by medical examination or supervisory observation, is shown to have, or appears to have, an illness, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination for whom there is a reasonable possibility of contact with preparation surfaces for Retail Marijuana or Retail Marijuana Product shall be excluded from any operations which may be expected to result in such contamination until the condition is corrected;
2. That hand-washing facilities shall be adequate and convenient and be furnished with running water at a suitable temperature. Hand-washing facilities shall be located in the Licensed Premises and/or in Retail Marijuana Product preparation areas and where good sanitary practices require employees to wash and/or sanitize their hands, and provide effective hand-cleaning and sanitizing preparations and sanitary towel service or suitable drying devices;
3. That all persons working in direct contact with preparation of Retail Marijuana or Retail Marijuana Product shall conform to hygienic practices while on duty, including but not limited to:
  - a. Maintaining adequate personal cleanliness;
  - b. Washing hands thoroughly in an adequate hand-washing area(s) before starting work, prior to engaging in the production of a Retail Marijuana Concentrate or manufacture of a Retail Marijuana Product and at any other time when the hands may have become soiled or contaminated; and
  - c. Refraining from having direct contact with preparation of Retail Marijuana or Retail Marijuana Product if the person has or may have an illness, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination, until such condition is corrected.

4. That there is sufficient space for placement of equipment and storage of materials as is necessary for the maintenance of sanitary operations for production of Retail Marijuana or Retail Marijuana Product;
5. That litter and waste are properly removed and the operating systems for waste disposal are maintained in an adequate manner so that they do not constitute a source of contamination in areas where Retail Marijuana or Retail Marijuana Product are exposed;
6. That floors, walls, and ceilings are constructed in such a manner that they may be adequately cleaned and kept clean and kept in good repair;
7. That there is adequate safety-type lighting in all areas where Retail Marijuana or Retail Marijuana Product are processed or stored and where equipment or utensils are cleaned;
8. That the Licensed Premises provides adequate screening or other protection against the entry of pests. Rubbish shall be disposed of so as to minimize the development of odor and minimize the potential for the waste becoming an attractant, harborage, or breeding place for pests;
9. That any buildings, fixtures, and other facilities are maintained in a sanitary condition;
10. That all contact surfaces, including utensils and equipment used for the preparation of Retail Marijuana, Retail Marijuana Concentrate or Retail Marijuana Product, shall be cleaned and sanitized as frequently as necessary to protect against contamination. Equipment and utensils shall be so designed and of such material and workmanship as to be adequately cleanable, and shall be properly maintained. Only sanitizers and disinfectants registered with the Environmental Protection Agency shall be used in a Retail Marijuana Products Manufacturing Facility and used in accordance with labeled instructions;
11. That toxic cleaning compounds, sanitizing agents, solvents used in the production of Retail Marijuana concentrate and other chemicals shall be identified, held, stored and disposed of in a manner that protects against contamination of Retail Marijuana, Retail Marijuana Concentrate or Retail Marijuana Product, and in a manner that is in accordance with any applicable local, state, or federal law, rule, regulation or ordinance;
12. That the water supply shall be sufficient for the operations intended and shall be derived from a source that is a regulated water system. Private water supplies shall be derived from a water source that is

capable of providing a safe, potable, and adequate supply of water to meet the Licensed Premises needs;

13. That plumbing shall be of adequate size and design and adequately installed and maintained to carry sufficient quantities of water to required locations throughout the plant and that shall properly convey sewage and liquid disposable waste from the Licensed Premises. There shall be no cross-connections between the potable and waste water lines;
14. That each Retail Marijuana Products Manufacturing Facility shall provide its employees with adequate and readily accessible toilet facilities that are maintained in a sanitary condition and good repair;
15. That all operations in the receiving, inspecting, transporting, segregating, preparing, manufacturing, packaging, and storing of Retail Marijuana or Retail Marijuana Product shall be conducted in accordance with adequate sanitation principles;
16. That Retail Marijuana or Retail Marijuana Product that can support the rapid growth of undesirable microorganisms shall be held in a manner that prevents the growth of these microorganisms; and
17. That storage and transport of finished Retail Marijuana Product shall be under conditions that will protect products against physical, chemical, and microbial contamination as well as against deterioration of any container.

E. Standard Operating Procedures

1. A Retail Marijuana Products Manufacturing Facility must have written standard operating procedures for each category of Retail Marijuana Concentrate and type of Retail Marijuana Product that it produces.
  - a. All standard operating procedures for the production of a Retail Marijuana Concentrate must follow the requirements in Rule R 605.
  - b. A copy of all standard operating procedures must be maintained on the Licensed Premises of the Retail Marijuana Products Manufacturing Facility.
2. If a Retail Marijuana Products Manufacturing Facility makes a Material Change to its standard Retail Marijuana Concentrate or Retail Marijuana Product production process, it must document the change and revise its standard operating procedures accordingly. Records detailing the Material Change must be maintained on the relevant Licensed Premises.



- F. Additives. A Retail Marijuana Products Manufacturing Facility shall not include any Additive that is toxic within a Retail Marijuana Product; nor include any Additive for the purposes of making the product more addictive, appealing to children or misleading consumers.
- G. Independent Health and Sanitary Audit
  - 1. State Licensing Authority May Require An Independent Health and Sanitary Audit
    - a. When the State Licensing Authority determines a health and sanitary audit by an independent consultant is necessary, it may require a Retail Marijuana Products Manufacturing Facility to undergo such an audit. The scope of the audit may include, but need not be limited to, whether the Retail Marijuana Products Manufacturing Facility is in compliance with the requirements set forth in this rule or other applicable food handling laws, rules or regulations or compliance with the concentrate production rules in Rule R 605 or other applicable laws, rules and regulations.
    - b. In such instances, the Division may attempt to mutually agree upon the selection of the independent consultant with a Retail Marijuana Products Manufacturing Facility. However, the Division always retains the authority to select the independent consultant regardless of whether mutual agreement can be reached.
    - c. The Retail Marijuana Products Manufacturing Facility will be responsible for all costs associated with the independent health and sanitary audit.
  - 2. When Independent Health and Sanitary Audit Is Necessary. The State Licensing Authority has discretion to determine when an audit by an independent consultant is necessary. The following is a non-exhaustive list of examples that may justify an independent audit:
    - a. A Retail Marijuana Products Manufacturing Facility does not provide requested records related to the food handling training required for Owners or Occupational Licensees engaged in the production of Edible Retail Marijuana Product to the Division;
    - b. A Retail Marijuana Products Manufacturing Facility does not provide requested records related to the production of Retail Marijuana Concentrate, including but not limited to, certification of its Licensed Premises, equipment or standard

operating procedures, training of Owners or Occupational Licensees, or Production Batch specific records;

- c. The Division has reasonable grounds to believe that the Retail Marijuana Products Manufacturing Facility is in violation of one or more of the requirements set forth in this rule or Rule R 605;
  - d. The Division has reasonable grounds to believe that the Retail Marijuana Products Manufacturing Facility was the cause or source of contamination of Retail Marijuana, Retail Marijuana Concentrate or Retail Marijuana Product; or
  - e. Multiple Production Batches of Retail Marijuana Concentrate or Retail Marijuana Product produced by the Retail Marijuana Products Manufacturing Facility failed contaminant testing.
3. Compliance Required. A Retail Marijuana Products Manufacturing Facility must pay for and timely cooperate with the State Licensing Authority's requirement that it undergo an independent health and sanitary audit in accordance with this rule.
4. Suspension of Operations
- a. If the State Licensing Authority has objective and reasonable grounds to believe and finds upon reasonable ascertainment of the underlying facts that the public health, safety or welfare imperatively requires emergency action and incorporates such findings into its order, it may order summary suspension of the Retail Marijuana Products Manufacturing Facility's license. See Rule R 1302 – Disciplinary Process: Summary Suspensions.
  - b. Prior to or following the issuance of such an order, the Retail Marijuana Products Manufacturing Facility may attempt to come to a mutual agreement with the Division to suspend its operations until the completion of the independent audit and the implementation of any required remedial measures.
    - i. If an agreement cannot be reached or the State Licensing Authority, in its sole discretion, determines that such an agreement is not in the best interests of the public health, safety or welfare, then the State Licensing Authority will promptly institute license suspension or revocation procedures. See Rule R 1302 – Disciplinary Process: Summary Suspensions.
    - ii. If an agreement to suspend operations is reached, then the Retail Marijuana Products Manufacturing

Facility may continue to care for its inventory and conduct any necessary internal business operations but it may not sell, transfer or wholesale Retail Marijuana, Retail Marijuana Concentrate or Retail Marijuana Product to another Retail Marijuana Establishment during the period of time specified in the agreement. Depending on the condition of the Retail Marijuana Products Manufacturing Facility and required remedial measures, the Division may permit a Retail Marijuana Products Manufacturing Facility to produce Retail Marijuana Concentrate or manufacture Retail Marijuana Product while operations have been suspended.

- H. Violation Affecting Public Safety. Failure to comply with this rule may constitute a license violation affecting public safety.

#### **Basis and Purpose – R 1004**

The statutory authority for this rule is found at subsections 12-43.4-202(2)(b), 12-43.4-202(3)(a)(IV), and 12-43.4-202(3)(a)(VII), 12-43.4-404(6), and 25-4-1614(3)(a), C.R.S. Authority also exists in the Colorado Constitution at Article XVIII, Subsection 16(5)(a)(VI). The purpose of this rule is to ensure that every Retail Marijuana Products Manufacturing Facility labels each Shipping Container and Container holding a Retail Marijuana Product with all of the necessary and relevant information for the receiving Retail Marijuana Establishment. In addition, this rule clarifies basic packaging requirements. The State Licensing Authority wants to ensure the regulated community employs proper labeling techniques to each Retail Marijuana Product as this is a public health and safety concern.

#### **R 1004 – Packaging and Labeling Requirements of a Retail Marijuana Product by a Retail Marijuana Products Manufacturing Facility**

- A. This rule is repealed effective February 1, 2015. Retail Marijuana Product Manufacturing Facilities shall refer to rule R 1004.5 for Retail Marijuana Product packaging and labeling requirements beginning February 1, 2015.
- B. Packaging of Retail Marijuana Product by a Retail Marijuana Products Manufacturing Facility
  - 1. Every Retail Marijuana Products Manufacturing Facility must ensure that each Retail Marijuana Product is individually packaged within a Container prior to transport or transfer to another Retail Marijuana Establishment.

2. Every Retail Marijuana Products Manufacturing Facility must ensure that each Container holding a Retail Marijuana Product is placed in a Shipping Container prior to transport or transfer to another Retail Marijuana Establishment.
- C. Labeling of Retail Marijuana Product Containers by a Retail Marijuana Products Manufacturing Facility. A Retail Marijuana Products Manufacturing Facility must ensure that a label(s) is affixed to every Container holding a Retail Marijuana Product that includes all of the information required by this rule prior to transport or transfer to another Retail Marijuana Establishment.
1. Required Information (General). Every Retail Marijuana Products Manufacturing Facility must ensure the following information is affixed to every Container holding a Retail Marijuana Product:
    - a. The license number of the Retail Marijuana Cultivation Facility(-ies) where the Retail Marijuana used to produce the Retail Marijuana Product was grown;
    - b. The Production Batch Number(s) of Retail Marijuana concentrate(s) used in the production of the Retail Marijuana Product.
    - c. The license number of the Retail Marijuana Products Manufacturing Facility that produced the Retail Marijuana Product.
    - d. The Production Batch Number(s) assigned to the Retail Marijuana Product.
    - e. A statement about whether the Container is Child-Resistant.
    - f. A clear set of usage instructions for non-Edible Retail Marijuana Product.
    - g. A complete list of all nonorganic pesticides, fungicides, and herbicides used during the cultivation of the Retail Marijuana used to produce the Retail Marijuana Product.
    - h. A complete list of solvents and chemicals used in the creation of any Retail Marijuana concentrate that was used to produce the Retail Marijuana Product.
  2. Required Information (Edible Retail Marijuana Product). Every Retail Marijuana Products Manufacturing Facility must ensure that the following information or statement is affixed to every Container holding an Edible Retail Marijuana Product:

- a. Ingredient List. A list of all ingredients used to manufacture the Edible Retail Marijuana Product; which may include a list of any potential allergens contained within.
  - b. Statement Regarding Refrigeration. If the Retail Marijuana Product is perishable, a statement that the Retail Marijuana Product must be refrigerated.
  - c. Serving Size Statement. **"The standardized serving size for this product includes no more than ten milligrams of active THC."**
  - d. Statement of Expiration Date. A product expiration date, for perishable Retail Marijuana Product, upon which the product will no longer be fit for consumption, or a use-by-date, upon which the product will no longer be optimally fresh. Once a label with a use-by or expiration date has been affixed to a Container holding a Retail Marijuana Product, a Licensee shall not alter that date or affix a new label with a later use-by or expiration date.
3. Permissive Information (Edible Retail Marijuana Product). Every Retail Marijuana Products Manufacturing Facility may affix a label(s) with the following information to every Container holding an Edible Retail Marijuana Product:
- a. The Retail Marijuana Product's compatibility with dietary restrictions; and
  - b. A nutritional fact panel that, if included, must be based on the number of THC servings within the Container.
4. Required Statement When Contaminant Tests are Performed. Every Retail Marijuana Products Manufacturing Facility must ensure that a label is affixed to each Container holding a Retail Marijuana Product with a statement asserting that the Retail Marijuana Product was tested for contaminants and the results of those tests, if:
- a. A Retail Marijuana Testing Facility(ies) tested every Harvest Batch used to produce the Retail Marijuana Product for (1) molds, mildew and filth; (2) microbials; (3) herbicides, pesticides and fungicides, (4) and harmful chemicals;
  - b. A Retail Marijuana Testing Facility tested every Production Batch of Retail Marijuana concentrate used to produce the Retail Marijuana Product for residual solvents, poisons or toxins; and

- c. A Retail Marijuana Testing Facility(ies) tested the Production Batch of the Retail Marijuana Product for microbials and molds, mildew and filth.
- 5. Required Statement if Cannabinoid Potency is Tested. If a Retail Marijuana Testing Facility tested the Production Batch of the Retail Marijuana Product within the Container for potency, then every Retail Marijuana Products Manufacturing Facility must ensure that a label is affixed to the Container with a potency profile expressed in milligrams and the number of THC servings within the Container.
- 6. Required Statement When No Containment Testing is Completed. Every Retail Marijuana Products Manufacturing Facility must ensure that a label is affixed to each Container that holds a Retail Marijuana Product with the statement: **"The marijuana product contained within this package has not been tested for contaminants."** unless:
  - a. A Retail Marijuana Testing Facility(ies) tested every Harvest Batch used to produce the Retail Marijuana Product for (1) molds, mildew and filth; (2) microbials; (3) herbicides, pesticides and fungicides, (4) and harmful chemicals;
  - b. A Retail Marijuana Testing Facility tested every Production Batch of Retail Marijuana concentrate used to produce the Retail Marijuana Product for residual solvents, poisons or toxins; and
  - c. A Retail Marijuana Testing Facility(ies) tested the Production Batch of the Retail Marijuana Product for microbials and molds, mildew and filth.
- 7. Required Statement When No Potency Testing Completed. If a Retail Marijuana Testing Facility did not test the Production Batch of the Retail Marijuana Product within a Container for potency, then every Retail Marijuana Products Manufacturing Facility must ensure that a label is affixed to the Container with the a statement: **"The marijuana product contained within this package has not been tested for potency, consume with caution."**
- D. Labeling of Retail Marijuana Product Shipping Containers by Retail Marijuana Products Manufacturing Facility. Prior to transporting or transferring any Retail Marijuana Product to another Retail Marijuana Establishment, a Retail Marijuana Manufacturing Products Facility must ensure that a label is affixed to a Shipping Container holding Retail Marijuana Product that includes all of the information required by this rule. A Retail Marijuana Products Manufacturing Facility must include the following information on every Shipping Container:

1. The number of Containers holding a Retail Marijuana Product within the Shipping Container; and
2. The license number of the Retail Marijuana Products Manufacturing Facility(-ies) that produced the Retail Marijuana Product within the Shipping Container.

#### **Basis and Purpose – R 1004.5**

The statutory authority for this rule is found at subsections 12-43.4-202(2)(b), 12-43.4-202(3)(a)(IV), and 12-43.4-202(3)(a)(VII), 12-43.4-404(6), and 25-4-1614(3)(a), C.R.S. Authority also exists in the Colorado Constitution at Article XVIII, Subsection 16(5)(a)(VI). The purpose of this rule is to ensure that every Retail Marijuana Products Manufacturing Facility labels each Shipping Container and Container holding a Retail Marijuana Product with all of the necessary and relevant information for the receiving Retail Marijuana Establishment. In addition, this rule clarifies basic packaging requirements. The State Licensing Authority wants to ensure the regulated community employs proper packaging and labeling techniques for each Retail Marijuana Product as this is a public health and safety concern.

#### **R 1004.5 – Packaging and Labeling Requirements of a Retail Marijuana Product by a Retail Marijuana Products Manufacturing Facility**

- A. Applicability. This rule shall apply to all Retail Marijuana Products manufactured on or after February 1, 2015.
- B. Packaging of Retail Marijuana Product by a Retail Marijuana Products Manufacturing Facility
  1. General Standard.
    - a. Every Retail Marijuana Products\_Manufacturing Facility must ensure that each Container holding a Retail Marijuana Product is placed in a Shipping Container prior to transport or transfer to another Retail Marijuana Establishment.
  2. Single-Serving Edible Retail Marijuana Product.
    - a. Every Retail Marijuana Products Manufacturing Facility must ensure that each Single-Serving Edible Retail Marijuana Product is individually packaged within a Child-Resistant Container prior to transport or transfer to another Retail Marijuana Establishment.
    - b. A Retail Marijuana Products Manufacturing Facility may bundle Single-Serving Edible Retail Marijuana Products that are individually packaged in Child-Resistant packaging and labeled

pursuant to Rule R 1004.5(C) into a larger package that does not need to be Child-Resistant so long as the total amount of active THC contained within the bundled package does not exceed 100 milligrams and the external packaging complies with the Serving Size and Total Active THC Statement requirement of subparagraph (C)(2)(c) of this rule.

3. Multiple-Serving Edible Retail Marijuana Product.

- a. Every Retail Marijuana Products Manufacturing Facility must ensure that each Multiple-Serving Edible Marijuana Product is individually packaged within a Child-Resistant Container that maintains its Child-Resistant effectiveness for multiple openings prior to transport or transfer to another Retail Marijuana Establishment.

4. Liquid Edible Retail Marijuana Product.

- a. Liquid Edible Retail Marijuana Product that contains no more than one Standardized Serving Of Marijuana. A Retail Marijuana Products Manufacturing Facility must ensure that each product complies with subparagraph (B)(2)(a) of this rule.
- b. Liquid Edible Retail Marijuana Product that contains more than one Standardized Serving Of Marijuana.
  - i. A Retail Marijuana Products Manufacturing Facility must ensure that each product is packaged in a Child-Resistant Container that maintains its Child-Resistant effectiveness for multiple openings; and
  - ii. The Container shall clearly demark each Standardized Serving Of Marijuana in a way that enables a reasonable person to intuitively determine how much of the product constitutes a single serving of active THC. The portion of the Container that clearly demarks each Standardized Serving Of Marijuana need not be Opaque; OR
  - iii. The Container shall include a device that allows a reasonable person to intuitively measure and serve a single serving of active THC.

C. Labeling of Retail Marijuana Product Containers by a Retail Marijuana Products Manufacturing Facility. A Retail Marijuana Products Manufacturing Facility must ensure that a label(s) is affixed to every Container holding a



Retail Marijuana Product that includes all of the information required by this rule prior to transport or transfer to another Retail Marijuana Establishment.

1. Required Information (General). Every Retail Marijuana Products Manufacturing Facility must ensure the following information is affixed to every Container holding a Retail Marijuana Product:
  - a. The license number of the Retail Marijuana Cultivation Facility(-ies) where the Retail Marijuana used to produce the Retail Marijuana Product was grown;
  - b. The Production Batch Number(s) of Retail Marijuana concentrate(s) used in the production of the Retail Marijuana Product.
  - c. The license number of the Retail Marijuana Products Manufacturing Facility that produced the Retail Marijuana Product.
  - d. A net weight statement.
  - e. The Production Batch Number(s) assigned to the Retail Marijuana Product.
  - f. A statement about whether the Container is Child-Resistant.
  - g. A clear set of usage instructions for non-Edible Retail Marijuana Product.
  - h. The Identity Statement and Standardized Graphic Symbol of the Retail Marijuana Products Manufacturing Facility that manufactured the Retail Marijuana Product. A Licensee may elect to have its Identity Statement also serve as its Standardized Graphic Symbol for purposes of complying with this rule. The Licensee shall maintain a record of its Identity Statement and Standardized Graphic Symbol and make such information available to the State Licensing Authority upon request;
  - i. The Universal Symbol, indicating that the Container holds marijuana, which must be no smaller than  $\frac{1}{4}$  of an inch by  $\frac{1}{4}$  of an inch;
  - j. The following warning statements:
    - i. **“There may be health risks associated with the consumption of this product.”**

- ii. **“This product is infused with marijuana.”**
  - iii. **“This product was produced without regulatory oversight for health, safety, or efficacy.”**
  - iv. **“The intoxicating effects of this product may be delayed by two or more hours.”**
  - v. **“There may be additional health risks associated with the consumption of this product for women who are pregnant, breastfeeding, or planning on becoming pregnant.”**
  - vi. **“Do not drive a motor vehicle or operate heavy machinery while using marijuana.”**
  - j. A complete list of all nonorganic pesticides, fungicides, and herbicides used during the cultivation of the Retail Marijuana used to produce the Retail Marijuana Product.
  - k. A complete list of solvents and chemicals used in the creation of any Retail Marijuana concentrate that was used to produce the Retail Marijuana Product.
2. Required Information (Edible Retail Marijuana Product). Every Retail Marijuana Products Manufacturing Facility must ensure that the following information or statement is affixed to every Container holding an Edible Retail Marijuana Product:
- a. Ingredient List. A list of all ingredients used to manufacture the Edible Retail Marijuana Product; which shall include a list of any potential allergens contained within.
  - b. Statement Regarding Refrigeration. If the Retail Marijuana Product is perishable, a statement that the Retail Marijuana Product must be refrigerated.
  - c. Serving Size and Total Active THC Statement. Information regarding: the size of Standardized Serving Of Marijuana for the product by milligrams, the total number of Standardized Servings of Marijuana in the product, and the total amount of active THC in the product by milligrams. For example: **“The serving size of active THC in this product is X mg, this product contains X servings of marijuana, and the total amount of active THC in this product is X mg.”**
  - d. Statement of Production Date. The date on which the Edible Retail Marijuana Product was produced.

- e. Statement of Expiration Date. A product expiration date, for perishable Retail Marijuana Product, upon which the product will no longer be fit for consumption, or a use-by-date, upon which the product will no longer be optimally fresh. Once a label with a use-by or expiration date has been affixed to a Container holding a Retail Marijuana Product, a Licensee shall not alter that date or affix a new label with a later use-by or expiration date.
  - f. A nutritional fact panel that must be based on the number of THC servings within the Container.
3. Permissive Information (Edible Retail Marijuana Product). Every Retail Marijuana Products Manufacturing Facility may affix a label(s) with the following information to every Container holding an Edible Retail Marijuana Product:
- a. The Retail Marijuana Product's compatibility with dietary restrictions.
4. Required Statement When Contaminant Tests are Performed. Every Retail Marijuana Products Manufacturing Facility must ensure that a label is affixed to each Container holding a Retail Marijuana Product with a statement asserting that the Retail Marijuana Product was tested for contaminants and the results of those tests, if:
- a. A Retail Marijuana Testing Facility(ies) tested every Harvest Batch used to produce the Retail Marijuana Product for contaminants required to be tested per rule R 1501;
  - b. A Retail Marijuana Testing Facility tested every Production Batch of Retail Marijuana concentrate used to produce the Retail Marijuana Product for contaminants required to be tested per rule R 1501; and
  - c. A Retail Marijuana Testing Facility(ies) tested the Production Batch of the Retail Marijuana Product for contaminants required to be tested per rule R 1501.
5. Required Statement When Cannabinoid Potency is Tested. Every Retail Marijuana Products Manufacturing Facility must ensure that a label is affixed to the Container with a potency profile expressed in milligrams pursuant to rule R 1503 and the number of THC servings within the Container.
6. Required Statement When No Contaminant Testing is Completed. Every Retail Marijuana Products Manufacturing Facility must ensure that a label is affixed to each Container that holds a Retail Marijuana

Product with the statement: **“The marijuana product contained within this package has not been tested for contaminants.”** unless:

- a. A Retail Marijuana Testing Facility(ies) tested every Harvest Batch used to produce the Retail Marijuana Product for contaminants required to be tested per rule R 1501;
  - b. A Retail Marijuana Testing Facility tested every Production Batch of Retail Marijuana concentrate used to produce the Retail Marijuana Product for contaminants required to be tested per rule R 1501; and
  - c. A Retail Marijuana Testing Facility(ies) tested the Production Batch of the Retail Marijuana Product for contaminants required to be tested per rule R 1501.
- D. Labeling of Retail Marijuana Product Shipping Containers by Retail Marijuana Products Manufacturing Facility. Prior to transporting or transferring any Retail Marijuana Product to another Retail Marijuana Establishment, a Retail Marijuana Manufacturing Products Facility must ensure that a label is affixed to a Shipping Container holding Retail Marijuana Product that includes all of the information required by this rule. A Retail Marijuana Products Manufacturing Facility must include the following information on every Shipping Container:
1. The number of Containers holding a Retail Marijuana Product within the Shipping Container; and
  2. The license number of the Retail Marijuana Products Manufacturing Facility(-ies) that produced the Retail Marijuana Product within the Shipping Container.

#### **Basis and Purpose – R 1006**

The statutory authority for this rule is found at subsections 12-43.4-202(2)(b), 12-43.4-202(3)(a)(IV), 12-43.4-202(3)(a)(VII), 12-43.4-402(4), and 25-4-1614(3)(a), C.R.S. Authority also exists in the Colorado Constitution at Article XVIII, Subsection 16(5)(a)(VI). The purpose of this rule is to ensure that the labeling on each Container holding a Retail Marijuana Product includes necessary and relevant information for consumers, does not include health and physical benefit claims, is easily accessible to consumers, and is clear and noticeable. In addition, this rule clarifies basic packaging requirements. Further, the State Licensing Authority believes based on written and oral comments it has received through the rulemaking process that prohibiting labels that are intended to target individuals under the age of 21 and requiring child-resistant packaging is of a state wide concern and would assist in limiting exposure and diversion to minors. The State Licensing Authority wants to ensure the regulated community employs proper labeling techniques to each Retail Marijuana Product as this is a public health and safety concern.

**R 1006 – Packaging and Labeling of Retail Marijuana Product by a Retail Marijuana Store**

- A. This rule is repealed effective February 1, 2015. Retail Marijuana Stores shall refer to rule R 1006.5 for Retail Marijuana Product packaging and labeling requirements beginning February 1, 2015.
- B. Packaging of Retail Marijuana Product by a Retail Marijuana Store. A Retail Marijuana Store must ensure that each Retail Marijuana Product is placed within a Container prior to sale to a consumer. If the Container is not Child-Resistant, the Retail Marijuana Store must place the Container within an Exit Package that is Child-Resistant.
- C. Labeling of Retail Marijuana Product by a Retail Marijuana Store. Every Retail Marijuana Store must ensure that a label(s) is affixed to every Container holding a Retail Marijuana Product that includes all of the information required by this rule prior to sale to a consumer:
  - 1. Required Information (General). Every Retail Marijuana Store must ensure the following information is affixed to every Container holding a Retail Marijuana Product:
    - a. The license number of the Retail Marijuana Cultivation Facility(-ies) where the Retail Marijuana used to produce the Retail Marijuana Product was grown;
    - b. The Production Batch Number(s) assigned to the Retail Marijuana concentrate used to produce the Retail Marijuana Product;
    - c. The license number of the Retail Marijuana Products Manufacturing Facility that produced the Retail Marijuana Product;
    - d. The Production Batch Number(s) assigned to the Retail Marijuana Product;
    - e. The license number of the Retail Marijuana Store that sold the Retail Marijuana Product to the consumer;
    - f. A statement about whether the Container is Child-Resistant;
    - g. The Identity Statement and Standardized Graphic Symbol of the Retail Marijuana Store that sold the Retail Marijuana Product to the consumer. A Licensee may elect to have its Identity Statement also serve as its Standardized Graphic Symbol for purposes of complying with this rule. The Licensee

- shall maintain a record of its Identity Statement and Standardized Graphic Symbol and make such information available to the State Licensing Authority upon request;
- h. The date of sale to the consumer;
  - i. The following warning statements:
    - i. **"There may be health risks associated with the consumption of this product."**
    - ii. **"This product is intended for use by adults 21 years and older. Keep out of the reach of children."**
    - iii. **"This product is unlawful outside the State of Colorado."**
    - iv. **"This product is infused with marijuana."**
    - v. **"This product was produced without regulatory oversight for health, safety, or efficacy."**
    - vi. **"The intoxicating effects of this product may be delayed by two or more hours."**
    - vii. **"There may be additional health risks associated with the consumption of this product for women who are pregnant, breastfeeding, or planning on becoming pregnant."**
    - viii. **"Do not drive a motor vehicle or operate heavy machinery while using marijuana."**
  - j. The Universal Symbol, indicating that the Container holds marijuana, which must be no smaller than ¼ of an inch by ¼ of an inch;
  - k. A clear set of instructions for proper usage for non-Edible Retail Marijuana Product;
  - l. A complete list of all nonorganic pesticides, fungicides, and herbicides used during the cultivation of the Retail Marijuana used to produce the Retail Marijuana Product; and
  - m. A complete list of solvents and chemicals used in the creation of any Retail Marijuana concentrate used in the produce of the Retail Marijuana Product.

2. Required Information (Edible Retail Marijuana Product). Every Retail Marijuana Store must ensure that the following information or statement is affixed to every Container holding an Edible Retail Marijuana Product:
  - a. Ingredient List. A list of all ingredients used to manufacture the Edible Retail Marijuana Product; which may include a list of any potential allergens contained within.
  - b. Statement Regarding Refrigeration. If the Retail Marijuana Product is perishable, a statement that the Retail Marijuana Product must be refrigerated.
  - c. Serving Size Statement. **"The standardized serving size for this product includes no more than ten milligrams of active THC."**
  - d. Statement of Expiration Date. A product expiration date, for perishable Retail Marijuana Product, upon which the product will no longer be fit for consumption, or a use-by-date, upon which the product will no longer be optimally fresh. Once a label with a use-by or expiration date has been affixed to a Container holding a Retail Marijuana Product, a Licensee shall not alter that date or affix a new label with a later use-by or expiration date.
3. Permissive Information (Edible Retail Marijuana Product). Every Retail Marijuana Store may affix a label(s) with the following information to every Container holding an Edible Retail Marijuana Product:
  - a. The Retail Marijuana Product's compatibility with dietary restrictions; and
  - b. A nutritional fact panel that, if included, must be based on the number of THC servings within the Container.
4. Required Statement When Contaminant Tests are Performed. Every Retail Marijuana Store must ensure that a label is affixed to each Container holding a Retail Marijuana Product with a statement asserting that the Retail Marijuana Product was tested for contaminants and the results of those tests, if:
  - a. A Retail Marijuana Testing Facility(ies) tested every Harvest Batch used to produce the Retail Marijuana Product for (1) molds, mildew and filth; (2) microbials; (3) herbicides, pesticides and fungicides, (4) and harmful chemicals;

- b. A Retail Marijuana Testing Facility tested every Production Batch of Retail Marijuana concentrate used to produce the Retail Marijuana Product for residual solvents, poisons or toxins; and
  - c. A Retail Marijuana Testing Facility(ies) tested the Production Batch of the Retail Marijuana Product for microbials and molds, mildew and filth.
- 5. Required Statement if Cannabinoid Potency is Tested. If a Retail Marijuana Testing Facility tested the Production Batch of the Retail Marijuana Product within the Container for potency, then every Retail Marijuana Store must ensure that a label is affixed to the Container with a potency profile expressed milligrams and the number of THC servings within the Container.
- 6. Required Statement When No Containment Testing is Completed. Every Retail Marijuana Store must ensure that a label is affixed to each Container that holds a Retail Marijuana Product with the statement: **"The marijuana product contained within this package has not been tested for contaminants."** unless:
  - a. A Retail Marijuana Testing Facility(ies) tested every Harvest Batch used to produce the Retail Marijuana Product for (1) molds, mildew and filth; (2) microbials; (3) herbicides, pesticides and fungicides, (4) and harmful chemicals;
  - b. A Retail Marijuana Testing Facility tested every Production Batch of Retail Marijuana concentrate used to produce the Retail Marijuana Product for residual solvents, poisons or toxins; and
  - c. A Retail Marijuana Testing Facility(ies) tested the Production Batch of the Retail Marijuana Product for microbials and molds, mildew and filth.
- 7. Required Statement When No Potency Testing Completed. If a Retail Marijuana Testing Facility did not test the Production Batch of the Retail Marijuana Product within a Container for potency, then every Retail Marijuana Store must ensure that a label is affixed to the Container with the a statement: **"The marijuana product contained within this package has not been tested for potency, consume with caution."**



**Basis and Purpose – R 1006.5**

The statutory authority for this rule is found at subsections 12-43.4-202(2)(b), 12-43.4-202(3)(a)(IV), 12-43.4-202(3)(a)(VII), 12-43.4-402(4), and 25-4-1614(3)(a), C.R.S. Authority also exists in the Colorado Constitution at Article XVIII, Subsection 16(5)(a)(VI). The purpose of this rule is to ensure that the labeling on each Container holding a Retail Marijuana Product includes necessary and relevant information for consumers, does not include health and physical benefit claims, is easily accessible to consumers, and is clear and noticeable. In addition, this rule clarifies basic packaging requirements. Further, the State Licensing Authority believes based on written and oral comments it has received through the rulemaking process that prohibiting labels that are intended to target individuals under the age of 21 and requiring child-resistant packaging is of a state wide concern and would assist in limiting exposure and diversion to minors. The State Licensing Authority wants to ensure the regulated community employs proper packaging and labeling techniques for each Retail Marijuana Product as this is a public health and safety concern.

**R 1006.5 – Packaging and Labeling of Retail Marijuana Product by a Retail Marijuana Store**

- A. Applicability. This rule shall apply to all Retail Marijuana Stores beginning February 1, 2015.
  - I. Packaging Requirements for a Retail Marijuana Store.
    - 1. Beginning February 1, 2015, a Retail Marijuana Store shall not purchase, take possession of, or sell Edible Retail Marijuana Product that does not comply with rule R 1004.5.
    - 2. A Retail Marijuana Store must ensure that each Edible Retail Marijuana Product placed within a Container for sale to a consumer pursuant to this rule must also be placed in an Opaque Exit Package at the point of sale to the consumer.
    - 3. A Retail Marijuana Store must ensure that each Retail Marijuana Product that is not an Edible Retail Marijuana Product is placed within a Container prior to sale to a consumer. If the Container is not Child-Resistant, the Retail Marijuana Store must place the Container within an Exit Package that is Child-Resistant.
- C. Labeling of Retail Marijuana Product by a Retail Marijuana Store. Every Retail Marijuana Store must ensure that a label(s) is affixed to every Exit Package at the time of sale to a consumer that includes all of the information required by this rule:
  - 1. Required Information (General). Every Retail Marijuana Store must ensure the following information is affixed to every Container holding a Retail Marijuana Product:

- a. The license number of the Retail Marijuana Store that sold the Retail Marijuana Product to the consumer;
- b. A statement about whether the Container is Child-Resistant;
- c. The Identity Statement and Standardized Graphic Symbol of the Retail Marijuana Store that sold the Retail Marijuana Product to the consumer. A Licensee may elect to have its Identity Statement also serve as its Standardized Graphic Symbol for purposes of complying with this rule. The Licensee shall maintain a record of its Identity Statement and Standardized Graphic Symbol and make such information available to the State Licensing Authority upon request;
- d. The date of sale to the consumer;
- e. The following warning statements:
  - i. **“There may be health risks associated with the consumption of this product.”**
  - ii. **“This product is intended for use by adults 21 years and older. Keep out of the reach of children.”**
  - iii. **“This product is unlawful outside the State of Colorado.”**
  - iv. **“This product is infused with marijuana.”**
  - v. **“This product was produced without regulatory oversight for health, safety, or efficacy.”**
  - vi. **“The intoxicating effects of this product may be delayed by two or more hours.”**
  - vii. **“There may be additional health risks associated with the consumption of this product for women who are pregnant, breastfeeding, or planning on becoming pregnant.”**
  - viii. **“Do not drive a motor vehicle or operate heavy machinery while using marijuana.”**
- f. The Universal Symbol, indicating that the Exit Package holds marijuana, which must be no smaller than  $\frac{1}{4}$  of an inch by  $\frac{1}{4}$  of an inch.

## Basis and Purpose – R 1503

The statutory authority for this rule is found at subsections 12-43.4-202(2)(b), 12-43.4-202(3)(a)(IV), 12-43.4-202(3)(a)(VII), 12-43.4-202(3)(a)(X), 12-43.4-202(3)(a)(XII), 12-43.4-202(3)(b)(III), 12-43.4-202(3)(b)(IX), 12-43.4-202(3)(c)(V), 12-43.4-202(3)(c)(VI), 12-43.4-202(3)(c)(VII), 12-43.4-402(4), 12-43.4-403(5), and 12-43.4-404(6), C.R.S. Authority also exists in the Colorado Constitution at Article XVIII, Subsection 16(5)(a)(VII). The purpose of this rule is to protect the public health and safety by establishing the potency testing portion of the Division's Retail Marijuana Sampling and Testing Program.

## R 1503 – Retail Marijuana Testing Program – Potency Testing

**Paragraphs A, D and E of this rule shall be effective on May 1, 2014. Paragraphs B and C of this rule shall be effective on June 1, 2014.**

### A. Potency Testing – General

1. Test Batches. A Test Batch submitted for potency testing may only be comprised of Samples that are of the same strain of Retail Marijuana or from the same Production Batch of Retail Marijuana Concentrate or Retail Marijuana Product.
2. Cannabinoid Profile. A potency test conducted pursuant to this rule must at least determine the level of concentration of THC, THCA, CBD, CBDA and CBN.

### B. Potency Testing for Retail Marijuana.

1. Initial Potency Testing. A Retail Marijuana Cultivation Facility must have potency tests conducted by a Retail Marijuana Testing Facility on four Harvest Batches, created a minimum of three weeks apart, for each strain of Retail Marijuana that it cultivates.
  - a. The first potency test must be conducted on each strain prior to the Retail Marijuana Cultivation Facility wholesaling, transferring or processing into a Retail Marijuana Concentrate any Retail Marijuana of that strain.
  - b. All four potency tests must be conducted on each strain no later than December 1, 2014 or six months after the Retail Marijuana Cultivation Facility begins cultivating that strain, whichever is later.
2. Ongoing Potency Testing. After the initial four potency tests, a Retail Marijuana Cultivation Facility shall have each strain of Retail Marijuana that it cultivates tested for potency at least once every six months.

- C. Potency Testing for Retail Marijuana Concentrate. A Retail Marijuana Cultivation Facility or Retail Marijuana Products Manufacturing Facility must have a potency test conducted by a Retail Marijuana Testing Facility on every Production Batch of Retail Marijuana Concentrate that it produces prior to wholesaling, transferring or processing into a Retail Marijuana Product any of the Retail Marijuana Concentrate from that Production Batch.
- D. Potency Testing for Retail Marijuana Product
  - 1. Potency Testing Required. A Retail Marijuana Products Manufacturing Facility shall have potency tests conducted by a Retail Marijuana Testing Facility on every Production Batch of Retail Marijuana Product that it produces prior to transferring or wholesaling any of the Retail Marijuana Product from that Production Batch.
    - a. The Retail Marijuana Products Manufacturing Facility has successfully process validated a Single-Serving Edible Retail Marijuana Product for potency and homogeneity and remained in compliance with the process validation requirements of subparagraphs (E)&(F) of this rule. Only Single-Serving Edible Retail Marijuana Products are eligible for process validation regarding potency and homogeneity.
  - 2. Required Tests. Potency tests conducted on Retail Marijuana Product must determine the level of concentration of the required cannabinoids and whether or not THC is homogeneously distributed throughout the product.
  - 3. Partially Infused Retail Marijuana Products. If only a portion of a Retail Marijuana Product is infused with Retail Marijuana, then the Retail Marijuana Products Manufacturing Facility must inform the Retail Marijuana Testing Facility of exactly which portions of the Retail Marijuana Product are infused and which portions are not.
- E. Validation of Process - Potency and Homogeneity - Single-Serving Edible Retail Marijuana Product.
  - 1. A Retail Marijuana Products Manufacturing Facility may process validate potency and homogeneity for each Single-Serving Edible Retail Marijuana Product it manufactures. If the Retail Marijuana Products Manufacturing Facility elects not to process validate for potency and homogeneity, then it must comply with the potency testing requirements of R 1503(D)(1)&(2). Multiple-Serving Edible Retail Marijuana Products are not eligible for process validation and must comply with the potency testing requirements of R 1503(D)(1)&(2).

2. A Retail Marijuana Products Manufacturing Facility's production process shall be deemed valid regarding potency and homogeneity if the first four Production Batches that it produces in no longer than an eight-week period pass all potency tests required by R 1503(D)(2). Each Test Batch submitted for Process Validation must be submitted at least six days apart and contain Samples from entirely different Production Batches.
  3. For a Single-Serving Edible Retail Marijuana Product to maintain its validated status, the Retail Marijuana Products Manufacturing Facility must submit a Sample from two separate Production Batches of the validated product on a quarterly basis after the initial validation of process. If any of the Samples fail potency testing, then the Retail Marijuana Products Manufacturing Facility's process must be re-validated.
- F. Required Re-Validation - Potency and Homogeneity - Single-Serving Edible Retail Marijuana Product.
1. Material Change Re-Validation. If a Retail Marijuana Products Manufacturing Facility elects to process validate any Single-Serving Edible Retail Marijuana Product for potency and homogeneity and it makes a Material Change to its production process, then the Retail Marijuana Products Manufacturing Facility must re-validate the production process.
    - a. New Equipment. It shall be considered a Material Change if the Retail Marijuana Products Manufacturing Facility begins using new or different equipment for any material part of the production process.
    - b. Notification. A Retail Marijuana Product Manufacturing Facility that makes a Material Change to the production process of a validated Single-Serving Edible Retail Marijuana Product must notify the Retail Marijuana Testing Facility that conducts potency and homogeneity testing on the first four Production Batches produced using the new standard operating procedures.
    - c. Testing Required Prior to Wholesale or Transfer. When a Production Batch is required to be submitted for testing pursuant to this rule, the Marijuana Product Manufacturing Facility that produced it may not wholesale or transfer Retail Marijuana Product from that Production Batch unless or until it obtains a passing test.
- G. Violation Affecting Public Safety. Failure to comply with this rule may constitute a license violation affecting public safety.

## Appendix E: Recommendation Template

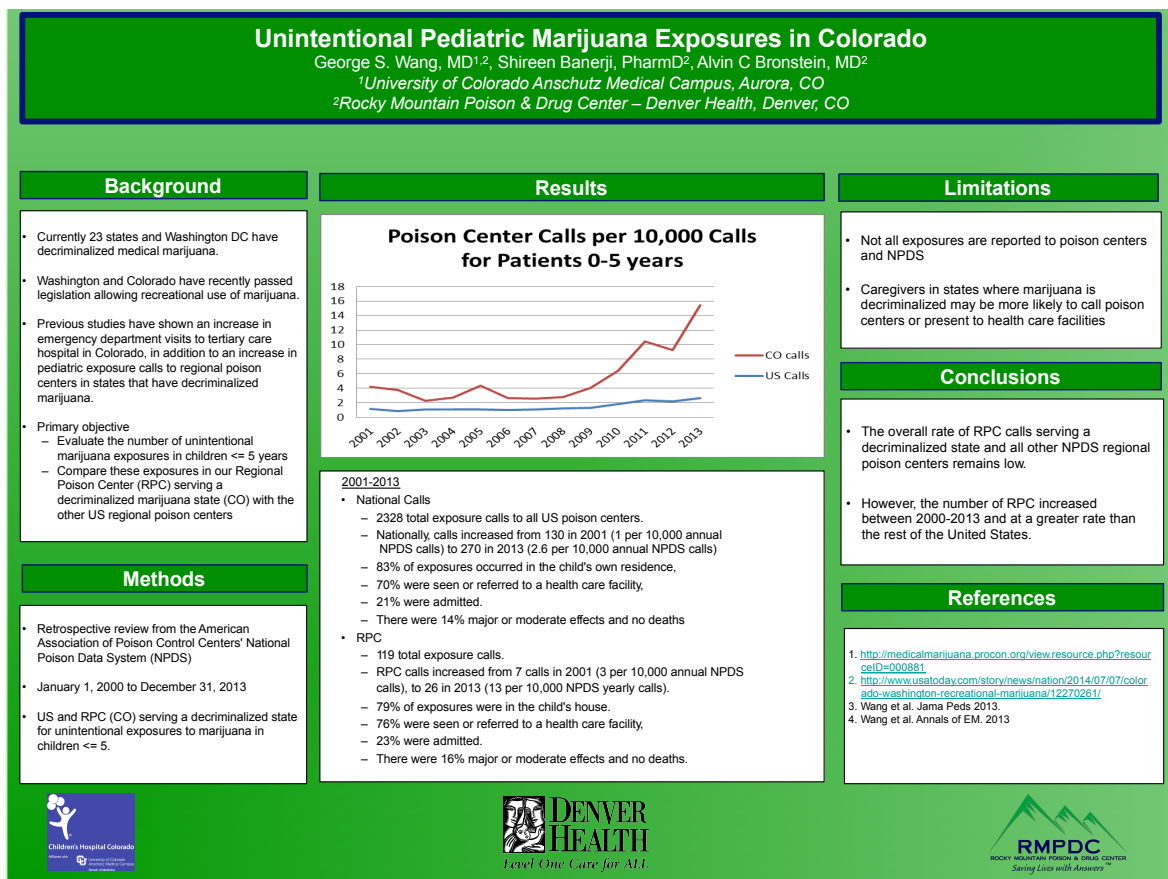
Rec. 1366-\_\_\_\_\_

### House Bill 14-1366 Work Group Legislative Report Recommendation Form

1. **Work Group Sponsor (s):**
2. **Describe the Recommendation:**
3. **Which portion or portions of House Bill 14-1366 does this recommendation address (underline all those that apply)?**
  - a. Protect people from the unintentional ingestion of edible retail marijuana products.
  - b. Ensure that edible retail marijuana products are readily identifiable by the general public.
  - c. Makes it clear that the product is not for consumption by children.
  - d. Makes it clear that the product is safe for consumers.
  - e. Utilize a universal symbol.
4. **Please summarize the rationale for the recommendation – why is it important?**
5. **Describe how your recommendation addresses the rulemaking guiding principles of being Defensible, Operable, Transparent, and Systematic for the licensees as well as the Marijuana Enforcement Division?**
6. **What stakeholders, other than licensees and the Marijuana Enforcement Division, would be positively or negatively impacted by this recommendation? Please explain the impact.**
7. **What issue or issues does your recommendation resolve? Please identify the issues.**
8. **Is there a dissenting voice on the working group concerning this recommendation? If yes, please provide a summary of the minority opinion about this recommendation.**
9. **Are you aware of any statutory authority or regulation that supports the basis of this recommendation? If yes, please include it here.**
10. **Is the implementation of your recommendation dependent on another decision or action? If yes, specifically what actions or decisions are required before this recommendation can be implemented?**
11. **Will the recommendation have a cost to implement? If yes, please explain the reason for the cost and provide an estimate.**
12. **Provide an estimate of how long it would take to implement the recommendation.**

## Appendix F: Stakeholder Submission - Unintentional Pediatric Marijuana Exposures

Submitted By: Children's Hospital Colorado





## Appendix G: Letter from Sponsors of HB 14-1366

Submitted By: The Authors during their Presentation to the Work Group, October 20, 2014

October 20, 2014

Mr. Lewis Koski  
Director, Marijuana Enforcement Division  
Colorado Department of Revenue  
455 Sherman Street, Suite 390  
Denver, Colorado 80203

Dear Director Koski:

Thank you for the leadership you have shown in advancing a slow, deliberate, safety-first direction for Colorado's retail marijuana industry. We appreciate the difficult task you have at hand, and appreciate your work.

You and others are currently in the process of setting a framework to implement HB 14-1366-- legislation aimed at curbing the development and sale of dangerous edible marijuana products. We write to you as the prime sponsors of HB 1366 to convey the intent behind the legislation and the outcomes we aimed to achieve.

The major impetus for HB 1366 continues to hold true-- we want to protect children and unwitting adults from becoming victims of accidental marijuana ingestion.

The tools advanced in HB 1366 do not prohibit the industry from producing any type of product. The bill does require marijuana product manufacturers to mark their products so the products can be easily identified as containing marijuana. It is imperative, and was our intent in enacting HB 1366, that the products themselves, and not the products' packaging, bear the symbol mandated in the bill. One year before enacting HB 1366, the General Assembly enacted HB 13-1317. Section 5 of HB 13-1317 requires that marijuana product packaging bear a symbol indicating that the package contains marijuana (this requirement is codified at Colo. Rev. Stat. § 12-43.4-202(3)(a)(vii)(O)). The General Assembly did not pass HB 1366 to simply repeat itself. HB 1366 was intended to require that the products themselves bear a symbol, not the products' packaging.

Furthermore, in drafting and passing HB 1366, we intended that if it is possible, by any means, to apply a symbol to an edible product, manufacturers must do so. The "when practicable" language in HB 1366 was not included to serve as a wholesale exemption that would allow manufacturers to continue putting our children at risk by side-stepping the protections implemented in HB 1366. A common symbol, color, and shape were each contemplated in drafting and passing HB 1366. We anticipated that the marijuana industry would incur costs and challenges marking their products with a symbol. However, we conceived and passed HB 1366 because the public safety threats posed by "look-a-like" marijuana edibles had to be addressed in spite of the costs and challenges the industry would incur. In the end, we intended HB 1366 to require that product manufacturers apply a symbol to their products if doing so is possible by any means.

The objective behind HB 1366 was simple; let's protect both children and adults from accidental marijuana ingestion. The Marijuana Enforcement Division's charge is to follow the directive



promulgated in HB 1366, and require that product manufacturers apply a symbol to their products when doing so is at all possible.

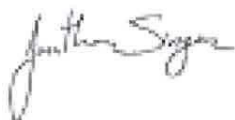
Thank you for your time and consideration. Please share our thanks to those on the task force dedicating their time to this critical public safety endeavor. Please feel free to contact any of us should you have questions.

And thank you again for your work on behalf of the people of Colorado. It is noticed and appreciated.

Sincerely,



Frank McNulty  
State Representative  
House District 43



Jonathan Singer  
State Representative  
House District 11



Michael Johnston  
State Senator  
Senate District 33

CC: Barbara Brohl, Executive Director, Colorado Department of Revenue.  
Ron Kammerzell, Senior Director of Enforcement, Colorado Department of Revenue.  
Andrew Freedman, Director of Marijuana Coordination, State of Colorado.  
Gina Carbone, Smart Colorado.

## Appendix H: Stakeholder Submission - Marijuana Edible Products

Submitted By: Work Group member Julie Dooley, Owner/Baker, Julie's Baked Goods,  
September 9, 2014

Category	Type	Description
Baked Goods	Brownie	Cheesecake graham cracker
Baked Goods	Brownie	Chocolate
Baked Goods	Brownie	Chocolate Chip
Baked Goods	Brownie	Dark chocolate fudge
Baked Goods	Brownie	Fudge
Baked Goods	Brownie	Mint and fudge
Baked Goods	Brownie	Raspberry chocolate heath
Baked Goods	Brownie	Walnut, dark fudge
Baked Goods	Cake	Fruit Cheesecake
Baked Goods	Cake	Key Lime Tart
Baked Goods	Cake	Mini Astro Cake
Baked Goods	Cake	Peanut Butter & Jelly Crumble
Baked Goods	Cereal	Crispy rice & Marshmallow
Baked Goods	Cereal	Marshmallow & Chocolate Cereal
Baked Goods	Cereal	Marshmallow & Fruit Cereal
Baked Goods	Cereal	Marshmallow & large Fudge Cereal
Baked Goods	Cereal	PB crisps, iced peanut butter rice cereal
Baked Goods	Cereal	Rice crisps, marshmallows and crunch berry cereal
Baked Goods	Cookies	Chocolate Chip
Baked Goods	Cookies	Chocolate chip espresso
Baked Goods	Cookies	Chocolate Chunk
Baked Goods	Cookies	Chocolate cookie bar with chocolate chip
Baked Goods	Cookies	Chocolate cookie crème sandwich
Baked Goods	Cookies	chocolate, butterscotch, potato chip, pretzels, graham crackers
Baked Goods	Cookies	Cream filled carrot cake cookie sandwich
Baked Goods	Cookies	Cream filled oatmeal sandwich
Baked Goods	Cookies	Gingersnaps
Baked Goods	Cookies	Gluten free peanut butter
Baked Goods	Cookies	Oatmeal butterscotch
Baked Goods	Cookies	Oatmeal raisin
Baked Goods	Cookies	Oatmeal, dark chocolate and cranberries
Baked Goods	Cookies	Orange Peel, Chocolate Butterscotch Chip
Baked Goods	Cookies	Peanut butter M&M
Baked Goods	Cookies	Peanut Butter Sandwich
Baked Goods	Cookies	Salted white chocolate macadamia nut
Baked Goods	Cookies	White chocolate macadamia nut
Baked Goods	Granola Bar	Almond

Category	Type	Description
Baked Goods	Granola Bar	Blueberry Pie
Baked Goods	Granola Bar	Cherry chocolate kola
Baked Goods	Granola Bar	Chia seeds, orange, cranberry
Baked Goods	Granola Bar	Chocolate peanut butter
Baked Goods	Granola Bar	Cinnamon apple pie
Baked Goods	Granola Bar	Cinnamon, apples, peach, apricot
Baked Goods	Granola Bar	Cranberry, orange zest, white chocolate chip Blondie
Baked Goods	Granola Bar	Ginger & cashew
Baked Goods	Granola Bar	Granola, Honey, vanilla, coconut oil,
Baked Goods	Granola Bar	Honey Nut, Gluten free
Baked Goods	Granola Bar	Spiced pumpkin, white chocolate chips, white chocolate & sprinkles
Baked Goods	Nuts	Mixed Nut Clusters
Baked Goods	Nuts	Pecans and caramel
Baked Goods	Pastry	Chocolate baklava
Baked Goods	Pastry	Chocolate haze Baklava
Baked Goods	Pastry	Nuts/Traditional Baklava
Baked Goods	Pastry	Peanut Butter Baklava
Baked Goods	Superfood	Go Chi Ball- Fruit, Spices & Herbs
Baked Goods	Superfood	Pumpkin seeds, Hazel nuts, Oats, Brazil nuts, Hemp seeds, Pecans, Almonds, Sunflower seeds, Cashews and Walnuts
Baked Goods	Superfood	Zoom ball - fruit, spices & hers rolled in coconut
Bulk Foods	Baking Mixes	Baba ghanoush
Bulk Foods	Cereal	Powder sugar coated rice cereal
Bulk Foods	Crackers	Rosemary Parmesan
Bulk Foods	Crackers	Soup crackers
Bulk Foods	Loose Granola	Granola mix, oats, cranberries, raisins, maple syrup, almonds and sunflower seeds
Bulk Foods	Meat / Dairy	Pizza
Bulk Foods	Nuts	Balsamic peppercorn cashews
Bulk Foods	Nuts	Balsamic peppercorn walnuts
Bulk Foods	Popcorn	Microwave
Bulk Foods	Trail Mix	Crunch Corn, rice/wheat cereal, pretzels, bagel chips, Snacked nuts and chocolate covered raisins
Bulk Foods	Trail Mix	Roasted Seeds; pumpkin and sunflower
Bulk Foods	Trail Mix	Trail Mix
Chocolate	Bar	Chocolate - Blueberries Flax & white chocolate

Category	Type	Description
Chocolate	Bar	Dark
Chocolate	Bar	Dark Chocolate & Coffee
Chocolate	Bar	Dark Chocolate & Espresso beans
Chocolate	Bar	Dark Salted
Chocolate	Bar	Dark with cinnamon
Chocolate	Bar	Milk & white chocolate with coconut oil, walnuts & bananas
Chocolate	Bar	Milk Chocolate
Chocolate	Bar	Milk Chocolate & Orange
Chocolate	Bar	Milk Chocolate & Peanut Butter
Chocolate	Bar	Milk Chocolate & Peppermint
Chocolate	Bar	Milk Chocolate & Rice crispies
Chocolate	Bar	Milk Chocolate & Spearmint
Chocolate	Bar	Milk Chocolate & Toffee , Almonds
Chocolate	Bar	Mint & Milk Chocolate Dabbas
Chocolate	Bar	White & Milk Chocolate & Toffee
Chocolate	Bar	White Chocolate & Fudge Cookies
Chocolate	Bar	White Chocolate & Peaches
Chocolate	Bar	White Chocolate & Pop Rocks
Chocolate	Bar	White Chocolate & Pretzels,
Chocolate	Bar	White Chocolate & Raspberries
Chocolate	Bar	White Chocolate & Strawberries with Flax
Chocolate	Bar	White Chocolate, Pretzels, Nougat, Marshmallows & Caramel
Chocolate	Candy Coated	Milk Chocolate dipped Pretzels
Chocolate	Candy Coated	White Chocolate Rabbit
Chocolate	Drop Chocolate	Coin Shaped Milk Chocolate
Chocolate	Truffle	Blueberries & Cranberries dipped in White Chocolate
Chocolate	Truffle	Cake & Almond Cookie dipped in Milk Chocolate
Chocolate	Truffle	Cake & frosting dipped in Milk Chocolate
Chocolate	Truffle	Caramel
Chocolate	Truffle	Chocolate Caramel
Chocolate	Truffle	Chocolate dipped Almond & Marshmallow
Chocolate	Truffle	Chocolate Mousse & cake dipped in Milk Chocolate
Chocolate	Truffle	Coconut & Walnuts dipped in Milk Chocolate
Chocolate	Truffle	D'z nuts, Milk chocolate dipped crunchy peanut butter
Chocolate	Truffle	Fruit filled, chocolate dipped grahms
Chocolate	Truffle	Milk Chocolate dipped Grahm

<b>Category</b>	<b>Type</b>	<b>Description</b>
Chocolate	Truffle	Peanut Butter & Coffee Bean dipped in Milk Chocolate
Chocolate	Truffle	Raspberry filled Jabanero dipped in Dark Chocolate
Chocolate	Truffle	Sugar Cone filled with peanute butter & dipped in Milk Chocolate
Chocolate	Truffle	Sunflower butter dipped in White and Milk Chocolate
Hard Candy	Sucker	Lollipop
Hard Candy	Sucker	Rock Candy
Hard Candy	Sucker	Suckers
Hard Candy	Sucker	Sugar Free Suckers
Hard Candy	Throat Lozenges	Cherry Drops
Hard Candy	Throat Lozenges	Cinnamon Drops
Hard Candy	Throat Lozenges	Cougher Drops
Hard Candy	Throat Lozenges	Fruit Flavors
Hard Candy	Throat Lozenges	Green Apple Drops
Hard Candy	Throat Lozenges	Lemon Drops
Hard Candy	Throat Lozenges	Peach Champagne
Hard Candy	Throat Lozenges	Sour Drops
Hard Candy	Throat Lozenges	Strawberry Lemonade
Hard Candy	Throat Lozenges	Sugar Free Lozenges
Hard Candy	Throat Lozenges	Trics
Liquids	Coffee	Canna cappuccino
Liquids	Coffee	Canna cappuccino vanilla
Liquids	Coffee	Caramel crème de high
Liquids	Cooking Oil	Cannabutter
Liquids	Cooking Oil	Olive Oil
Liquids	Cooking Oil	Whipped honey cream butter
Liquids	Juice	Black Tea
Liquids	Juice	Blueberry
Liquids	Juice	Fruit Punch
Liquids	Juice	Lemon Lime
Liquids	Juice	Lemonade
Liquids	Juice	Mandarin
Liquids	Juice	Orange
Liquids	Juice	Orange Cream
Liquids	Juice	Peach
Liquids	Juice	Pomegranate
Liquids	Juice	Red Currant
Liquids	Juice	Watermelon Cream
Liquids	Juice	Wild berry

Category	Type	Description
Liquids	Sauce	Marinara
Liquids	Sauce	Tapenade
Liquids	Sauce	Wing Sauce
Liquids	Soft Drink	Cherry Cola
Liquids	Soft Drink	Energy Drink
Liquids	Soft Drink	Orange Soda
Liquids	Soft Drink	Raspberry Soda
Liquids	Soft Drink	Root Beer
Liquids	Soft Drink	Sarsaparilla
Liquids	Tea	Apple Pie High
Liquids	Tea	Chai high tea
Liquids	Tea	Green Tea
Liquids	Tea	Mint Green Tea
Liquids	Tea	Pumpkin Pie High
Liquids	Tea	Yerba Mate
Mixes & Effervescent	Coffee	Army intelligence blend
Mixes & Effervescent	Coffee	Freudian couch
Mixes & Effervescent	Coffee	Humming taosian
Mixes & Effervescent	Coffee	Rothko Pomegranate
Mixes & Effervescent	Coffee	Tibetan Tater Tots
Mixes & Effervescent	Coffee	Twyla lite blend
Mixes & Effervescent	Juice	Grapefruit
Mixes & Effervescent	Oral Dissolvables	9ml Sub-lingual spray
Mixes & Effervescent	Oral Dissolvables	Cannabis syrup
Mixes & Effervescent	Oral Dissolvables	Mout Strips
Mixes & Effervescent	Powdered Beverage	Grape, Cherry, Lemonade, Fruit Punch
Mixes & Effervescent	Tea	Chai
Mixes & Effervescent	Tea	Green
Mixes & Effervescent	Tea	Herbal
Mixes & Effervescent	Tea	Tea Bags
Pills	Capsules	Cannabis Tears
Pills	Capsules	Clarinol in Veggie cap
Pills	Capsules	Incredipils
Pills	Capsules	Infused Coconut oil in veggie cap
Pills	Capsules	Kush Kaps
Pills	Capsules	Script Capsules
Pills	Pressed Pills	Lemon Chill Pills
Pills	Pressed Pills	Med a Mints
Pills	Pressed Pills	Spearmint Chill Pills
Soft Candy	Chocolate Chews	Cheebea Chews
Soft Candy	Chocolate Chews	Chocolate chew

<b>Category</b>	<b>Type</b>	<b>Description</b>
Soft Candy	Fruit Chews	Flavored chews
Soft Candy	Fruit Chews	Flavored Cream Chews
Soft Candy	Fruit Chews	Wana Rolls
Soft Candy	Gummies	Apple Tarts
Soft Candy	Gummies	Blueberry Belts
Soft Candy	Gummies	Bubbly Cherry Cola
Soft Candy	Gummies	Cherry Bombs
Soft Candy	Gummies	Cherry Tarts
Soft Candy	Gummies	Fish
Soft Candy	Gummies	Giant Claudie Bears
Soft Candy	Gummies	Gourmet Tropical Tarts
Soft Candy	Gummies	Grapefruit Gummies
Soft Candy	Gummies	Green Hornet
Soft Candy	Gummies	Gum e
Soft Candy	Gummies	Peach Banana Rings
Soft Candy	Gummies	Rainbow Belts
Soft Candy	Gummies	Raspberry Blackberry Gummies
Soft Candy	Gummies	Sour Gummy Bears
Soft Candy	Gummies	Strawberry Belt
Soft Candy	Gummies	Strawberry Crème
Soft Candy	Gummies	Sweet and Sours
Soft Candy	Gummies	Watermelon Tarts
Soft Candy	Licorice	Licorice
Soft Candy	Taffy	Salted Caramels
Tinctures	Sublingual	30ml Sub-lingual
Tinctures	Sublingual	Dew Drops
Tinctures	Sublingual	Liquid THC
Tinctures	Sublingual	Tincture

## Appendix I: Mapping Exercise for Identifying Types of Marijuana Products

Marijuana Edible Category	Marking (stamp, stencil, score)								Shape								Color							
	D		O		T		S		D		O		T		S		D		O		T		S	
	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R
Baked Goods																								
Bulk Foods																								
Chocolate	X	X	X	X	X	X	X	X			X	X	X	X	X	X								
Hard Candy	X	X	X	X	X	X	X	X			X	X	X	X	X	X								
Liquids																								
Mixes & Effervescent																								
Pills	X	X	X	X	X	X	X	X			X	X	X	X	X	X								
Soft Candy											X	X	X	X	X	X								
Tinctures																								

Marijuana Edible Category	Smell								Labeling & Packaging							
	D		O		T		S		D		O		T		S	
	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R
Baked Goods									X	X	X	X	X	X	X	X
Bulk Foods									X	X	X	X	X	X	X	X
Chocolate									X	X	X	X	X	X	X	X
Hard Candy									X	X	X	X	X	X	X	X
Liquids									X	X	X	X	X	X	X	X
Mixes & Effervescent									X	X	X	X	X	X	X	X
Pills									X	X	X	X	X	X	X	X
Soft Candy									X	X	X	X	X	X	X	X
Tinctures									X	X	X	X	X	X	X	X

Key:

D - Defensible

O - Operable

T - Transparent

S - Systematic

L - Licensees

R - Regulators



## Appendix J: Stakeholder Submission - Marking Edible Marijuana Products

Submitted By: Smart Colorado

Category	Type	Description	Methods of Marking
Baked Goods	Brownie	Raspberry chocolate heath	(1) Airbrushing the standard symbol on the brownie using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which brownie batter can be poured; (3) Use of a stencil or branding device to imprint the standard symbol on the brownie after it has been baked and before it hardens; or (4) Application of frosting in the shape of the standard symbol.
Baked Goods	Brownie	Cheesecake graham cracker	
Baked Goods	Brownie	Chocolate	
Baked Goods	Brownie	Chocolate Chip	
Baked Goods	Brownie	Dark chocolate fudge	
Baked Goods	Brownie	Fudge	
Baked Goods	Brownie	Mint and fudge	
Baked Goods	Brownie	Walnut, dark fudge	(1) Airbrushing the standard symbol on the cake using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which cake batter can be poured; or (3) Application of frosting in the shape of the standard symbol.
Baked Goods	Cake	Fruit Cheesecake	
Baked Goods	Cake	Key LimeTart	
Baked Goods	Cake	Mini Astro Cake	
Baked Goods	Cake	Peanut Butter & Jelly Crumble	The presence of marijuana in bulk food items should be symbolized with a standard color. Manufacturers can use an airbrush tool to apply the standard color to bulk items.
Baked Goods	Cereal	PB crisps, iced peanut butter rice cereal	
Baked Goods	Cereal	Rice crispier, marshmallows and crunch berry cereal	
Baked Goods	Cereal	Crispy rice & Marshmallow	(1) Airbrushing the standard symbol on the cake using a stencil and organic or nonorganic food coloring; (2) Use of a stencil or branding device to imprint the standard symbol on the bar.
Baked Goods	Cereal	Marshmallow & Chocolate Cereal	The presence of marijuana in bulk food items should be symbolized with a standard color. Manufacturers can use an airbrush tool to apply the standard color to bulk items.
Baked Goods	Cereal	Marshmallow & Fruit Cereal	
Baked Goods	Cereal	Marshmallow & large Fudge Cereal	
Baked Goods	Cookies	Chocolate Chip	(1) Airbrushing the standard symbol on the cookie using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which cookie batter can be poured; (3) Use of a stencil or branding device to imprint the standard symbol on the cookie after it has been baked and before it hardens; or (4) Application of frosting in the shape of the standard symbol.
Baked Goods	Cookies	Chocolate chip espresso	
Baked Goods	Cookies	Chocolate Chunk	
Baked Goods	Cookies	Chocolate cookie bar with chocolate chip	
Baked Goods	Cookies	Chocolate cookie creme sandwich	
Baked Goods	Cookies	chocolate, butterscotch, potato chip, pretzels, graham crackers	
Baked Goods	Cookies	Cream filled carrot cake cookie sandwich	
Baked Goods	Cookies	Cream filled oatmeal sandwich	
Baked Goods	Cookies	Gingersnaps	
Baked Goods	Cookies	Gluten free peanut butter	
Baked Goods	Cookies	Oatmeal butterscotch	
Baked Goods	Cookies	Oatmeal raisin	

Category	Type	Description	Methods of Marking
Baked Goods	Cookies	Oatmeal, dark chocolate and cranberries	1) Airbrushing the standard symbol on the cookie using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which cookie batter can be poured; (3) Use of a stencil or branding device to imprint the standard symbol on the cookie after it has been baked and before it hardens; or (4) Application of frosting in the shape of the standard symbol.
Baked Goods	Cookies	Orange Peel, Chocolate Butterscotch Chip	
Baked Goods	Cookies	Peanut butter M&M	
Baked Goods	Cookies	Peanut Butter Sandwich	
Baked Goods	Cookies	Salted white chocolate macadamia nut	
Baked Goods	Cookies	White chocolate macadamia nut	
Baked Goods	Granola Bar	Almond	(1) Airbrushing the standard symbol on the granola bar using a stencil and organic or nonorganic food coloring; (2) Use of a stencil or branding device to imprint the standard symbol on the bar.
Baked Goods	Granola Bar	Blueberry Pie	
Baked Goods	Granola Bar	Cherry chocolate kola	
Baked Goods	Granola Bar	Chia seeds, orange, cranberry	
Baked Goods	Granola Bar	Chocolate peanut butter	
Baked Goods	Granola Bar	Cinnamon apple pie	
Baked Goods	Granola Bar	Cinnamon , apples, peach, apricot	
Baked Goods	Granola Bar	Cranberry, orange zest, white chocolate chip Blondie	
Baked Goods	Granola Bar	Ginger & cashew	
Baked Goods	Granola Bar	Granola, Honey, vanilla, coconut oil,	
Baked Goods	Granola Bar	Honey Nut, Gluten free	
Baked Goods	Granola Bar	Spiced pumpkin, white chocolate chips, white chocolate & sprinkles	
Baked Goods	Pastry	Chocolate baklava	Airbrushing the standard symbol on the pastries and superfoods using a stencil and organic or nonorganic food coloring.
Baked Goods	Pastry	Chocolate haze Baklava	
Baked Goods	Pastry	Nuts/Traditional Baklava	
Baked Goods	Pastry	Peanut Butter Baklava	
Baked Goods	Superfood	Go Chi Ball- Fruit, Spices & Herbs	
Baked Goods	Superfood	Zoom ball - fruit, spices &; hers rolled in coconut	
Bulk Food	Superfood	Pumpkin seeds, Hazel nuts, Oats, Brazil nuts, Hemp seeds, Pecans, Almonds, Sunflower seeds, Cashews and Walnuts	The presence of marijuana in bulk food items should be symbolized with a standard color. Manufacturers can use an airbrush tool to apply the standard color to bulk items.
Bulk Food	Cereal	Powder sugar coated rice cereal	
Bulk Food	Crackers	Rosemary Parmesan	Airbrushing the standard symbol on the crackers using a stencil and organic or nonorganic food coloring.
Bulk Food	Crackers	Soup crackers	
Bulk Food	Loose Granola	Granola mix, oats, cranberries, raisins, maple syrup, almonds and sunflower seeds	The presence of marijuana in bulk food items should be symbolized with a standard color. Manufacturers can use an airbrush tool to apply the standard color to bulk items.
Bulk Food	Nuts	Balsamic peppercorn cashews	
Bulk Food	Nuts	Balsamic peppercorn walnuts	
Bulk Food	Popcorn	Microwave	
Bulk Food	Trail Mix	Crunch, Corn, rice/wheat cereal, pretzels, bagel chips, Snacked nuts and chocolate covered raisins	

Category	Type	Description	Methods of Marking
Bulk Food	Trail Mix	Roasted Seeds; pumpkin and sunflower	The presence of marijuana in bulk food items should be symbolized with a standard color. Manufacturers can use an airbrush tool to apply the standard color to bulk items.
Bulk Food	Trail Mix	Trail Mix	
Chocolate	Bar	Chocolate - Blueberries Flax & white chocolate	(1) Airbrushing the standard symbol on the chocolate using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which chocolate can be poured; (3) Use of a stencil or branding device to imprint the standard symbol on the chocolate before it hardens.
Chocolate	Bar	Dark chocolate fudge	
Chocolate	Bar	Dark Chocolate & Coffee	
Chocolate	Bar	Dark Chocolate & Espresso beans	
Chocolate	Bar	Dark Salted	
Chocolate	Bar	Dark with cinnamon	
Chocolate	Bar	Milk & white chocolate with coconut oil, walnuts & bananas	
Chocolate	Bar	Milk Chocolate	
Chocolate	Bar	Milk Chocolate & Orange	
Chocolate	Bar	Milk Chocolate & Peanut Butter	
Chocolate	Bar	Milk Chocolate & Peppermint	
Chocolate	Bar	Milk Chocolate & Rice Crispies	
Chocolate	Bar	Milk Chocolate & Spearmint	
Chocolate	Bar	Milk Chocolate & Toffee, Almonds	
Chocolate	Bar	Mint & Milk Chocolate Dabbas	
Chocolate	Bar	White & Milk Chocolate & Toffee	
Chocolate	Bar	White Chocolate & Fudge Cookies	
Chocolate	Bar	White Chocolate & Peaches	
Chocolate	Bar	White Chocolate & Pop Rocks	
Chocolate	Bar	White Chocolate & Pretzels,	
Chocolate	Bar	White Chocolate & Raspberries	
Chocolate	Bar	White Chocolate & Strawberries with Flax	
Chocolate	Bar	White Chocolate, Pretzels, Nougat, Marshmallows & Caramel	
Chocolate	Candy Coated	Milk Chocolate dipped. Pretzels	
Chocolate	Candy Coated	White Chocolate Rabbit	
Chocolate	Drop Chocolate	Coin Shaped. Milk Chocolate	
Chocolate	Truffle	Blueberries & Cranberries dipped in White Chocolate	
Chocolate	Truffle	Cake & Almond Cookie dipped in Milk Chocolate	
Chocolate	Truffle	Cake & frosting dipped in Milk Chocolate	
Chocolate	Truffle	Caramel	
Chocolate	Truffle	Chocolate Caramel	
Chocolate	Truffle	Chocolate dipped Almond & Marshmallow	

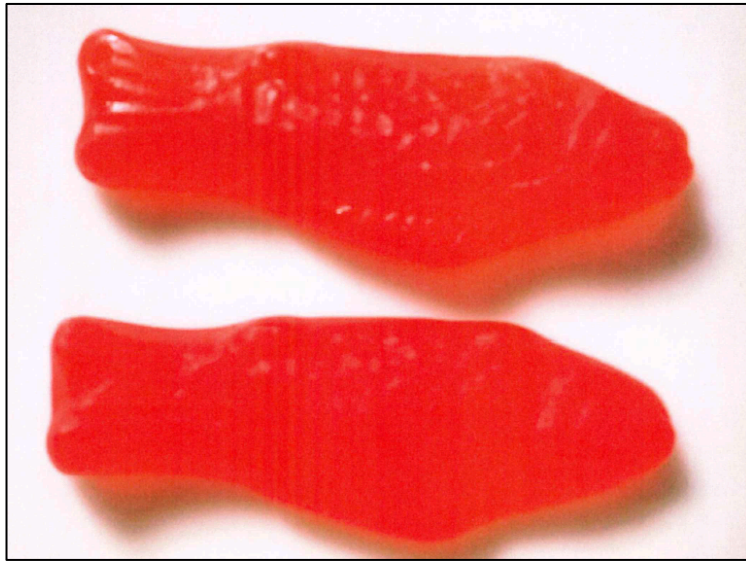
Category	Type	Description	Methods of Marking
Chocolate	Truffle	Chocolate Mousse & cake dipped in Milk Chocolate	(1) Airbrushing the standard symbol on the chocolate using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which chocolate can be poured; (3) Use of a stencil or branding device to imprint the standard symbol on the chocolate before it hardens.
Chocolate	Truffle	Coconut & Walnuts dipped in Milk Chocolate	
Chocolate	Truffle	D'z nuts, Milk chocolate dipped crunchy peanut butter	
Chocolate	Truffle	Fruit filled, chocolate dipped grahams	
Chocolate	Truffle	Milk Chocolate dipped Graham	
Chocolate	Truffle	Peanut Butter & Coffee Bean dipped in Milk Chocolate	
Chocolate	Truffle	Raspberry filled Jabanero dipped in Dark Chocolate	
Chocolate	Truffle	Sugar Cone filled with peanut butter & dipped in Milk Chocolate	
Chocolate	Truffle	Sunflower butter dipped in White and Milk Chocolate	
Concentrate	Cooking Oil	Cannabutter	The presence of marijuana in liquids should be symbolized with a standard color. Manufacturers can apply the standard color to liquids during the production process.
Concentrate	Cooking Oil	Whipped honey cream butter	
Hard Candy	Sucker	Lollipop	(1) Airbrushing the standard symbol on the candy using a stencil and organic or nonorganic food coloring; (2) Use of a mold to imprint the standard symbol on the candy; (3) Use of a stencil or branding device to imprint the standard symbol on the candy before it hardens.
Hard Candy	Sucker	Rock Candy	
Hard Candy	Sucker	Suckers	
Hard Candy	Sucker	Sugar Free Suckers	
Hard Candy	Throat Lozenges	Cherry Drops	
Hard Candy	Throat Lozenges	Cinnamon Drops	
Hard Candy	Throat Lozenges	Cougher Drops	
Hard Candy	Throat Lozenges	Fruit Flavors	
Hard Candy	Throat Lozenges	Green Apple Drops	
Hard Candy	Throat Lozenges	Lemon Drops	
Hard Candy	Throat Lozenges	Peach Champagne	
Hard Candy	Throat Lozenges	Sour Drops	
Hard Candy	Throat Lozenges	Strawberry, Lemonade	
Hard Candy	Throat Lozenges	Sugar Free Lozenges	
Hard Candy	Throat Lozenges	Trics	
Liquid	Coffee	Canna cappuccino	The presence of marijuana in liquids should be symbolized with a standard color. Manufacturers can apply the standard color to liquids during the production process.
Liquid	Coffee	Canna cappuccino vanilla	
Liquid	Coffee	Caramel crème de high	
Liquid	Cooking Oil	Olive Oil	
Liquid	juice	Black Tea	
Liquid	juice	Blueberry	
Liquid	Juice	Fruit Punch	
Liquid	Juice	Lemon Lime	
Liquid	Juice	Lemonade	

Category	Type	Description	Methods of Marking
Liquid	Juice	Mandarin	The presence of marijuana in liquids should be symbolized with a standard color. Manufacturers can apply the standard color to liquids during the production process.
Liquid	Juice	Orange	
Liquid	juice	Orange Cream	
Liquid	Juice	Peach	
Liquid	Juice	Pomegranate	
Liquid	Juice	Red Currant	
Liquid	Juice	Watermelon Cream	
Liquid	Juice	Wild berry	
Liquid	Sauce	Marinara	
Liquid	Sauce	Tapenade	
Liquid	Sauce	Wing Sauce	
Liquid	Soft Drink	Cherry Cola	
Liquid	Soft Drink	Energy Drink	
Liquid	Soft Drink	Orange Soda	
Liquid	Soft Drink	Raspberry Soda	
Liquid	Soft Drink	Root Beer	
Liquid	Soft Drink	Sarsaparilla	
Liquid	Tea	Apple Pie High	
Liquid	Tea	Chai high tea	
Liquid	Tea	Green Tea	
Liquid	Tea	Mint Green Tea	
Liquid	Tea	Pumpkin Pie High	
Liquid	Tea	Yerba Mate	
Pills	Capsules	Cannabis Tears	The presence of marijuana in pills should be symbolized with a standard color.
Pills	Capsules	Clarinol In Veggie cap	
Pills	Capsules	Incredipils	
Pills	Capsules	infused Coconut oil in veggie cap	
Pills	Capsules	Kush Kaps	
Pills	Capsules	Script Capsules	
Pills	Pressed Pills	Lemon Chill Pills	
Pills	Pressed Pills	Med a Mints	
Pills	Pressed Pills	Spearmint Chill Pills	
Soft Candy	Chocolate Chews	Cheebe Chews	(1) Airbrushing the standard symbol on the candy using a stencil and organic or nonorganic food coloring; (2) Use of a mold to imprint the standard symbol on the candy; or (3) Use of a stencil or branding device to imprint the standard symbol on the candy.
Soft Candy	Chocolate Chews	Chocolate chew	
Soft Candy	Fruit Chews	Flavored chews	
Soft Candy	Fruit Chews	Flavored Cream Chews	
Soft Candy	Fruit Chews	Wana Rolls	
Soft Candy	Gummies	Bubbly Cherry Cola	

Category	Type	Description	Methods of Marking
Soft Candy	Gummies	Green Hornet	(1) Airbrushing the standard symbol on the candy using a stencil and organic or nonorganic food coloring; (2) Use of a mold to imprint the standard symbol on the candy; or (3) Use of a stencil or branding device to imprint the standard symbol on the candy.
Soft Candy	Gummies	Apple Tarts	
Soft Candy	Gummies	Blueberry Belts	
Soft Candy	Gummies	Cherry Bomba	
Soft Candy	Gummies	Cherry Tarts	
Soft Candy	Gummies	Fish	
Soft Candy	Gummies	Giant Claudi Bears	
Soft Candy	Gummies	Gourmet Tropical Tarts	
Soft Candy	Gummies	Grapefruit Gummies	
Soft Candy	Gummies	Gum e	
Soft Candy	Gummies	Peach Banana Rings	
Soft Candy	Gummies	Rainbow Belts	
Soft Candy	Gummies	Raspberry Blackberry Gummies	
Soft Candy	Gummies	Sour Gummy Bears	
Soft Candy	Gummies	Strawberry Belt	
Soft Candy	Gummies	Strawberry Crème	
Soft Candy	Gummies	Sweet and Sours	
Soft Candy	Gummies	Watermelon Tarts	
Soft Candy	Licorice	Licorice	
Soft Candy	Taffy	Salted Caramels	

## Appendix K: Stakeholder Submission - Marijuana-Infused and Regular Candies

Submitted By: Smart Colorado





## Appendix L: Stakeholder Submission - Edible Marijuana Products with Identifying Symbols and Colors

Submitted By: Smart Colorado



Wonderlands Green

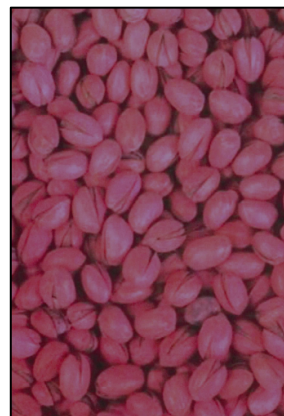
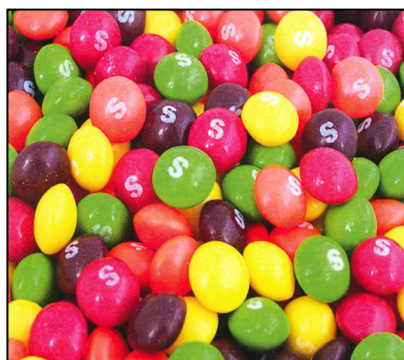


Wonderlands Red



## Appendix M: Stakeholder Submission - Non-Marijuana Products with Identifying Symbols and Colors

Submitted By: Smart Colorado



## Appendix N: Stakeholder Submission – Marking Edible Marijuana Products

Submitted By: Work Group member John Wisler, Food Product Development Specialist,  
December 1, 2014

### Applying Symbols to Edible Marijuana Products

Based on my experience and expertise, I believe the techniques described below will be effective methods of applying a symbol to edible marijuana products. A food specialist in Colorado should work with manufacturers to ensure compliance with the requirements of HB 14-1366 to make sure that marijuana products are recognizable.

Undoubtedly, manufacturers will incur costs marking their products. In many instances, I have estimated the costs of each proposed marking technique. As you will see, the costs manufacturers would incur applying a symbol to their products are not overly burdensome.

Of course each manufacturer's production process is different, and I do not presume to understand every detail of each unique process. Applying the marking techniques described below will be easier for some manufacturers than it will be for others. So, while each marking technique described below is an accomplishable and effective method of applying a symbol to food products, the process of employing these methods will be different for each manufacturer. For all of the marking techniques I have listed, there are a wide variety of suppliers available for consultation and support.

#### Baked Goods:

Below are achievable methods of applying a symbol to baked goods, an explanation of the process required to apply a symbol to the products, and an estimate of the costs manufacturers would absorb when implementing the proposed marking techniques.

- **Airbrushing and Stenciling:** A standardized symbol can be applied to baked goods (e.g. brownies, cookies, cupcakes, pastries, miniature cakes, granola bars, etc.) using a bakery airbrushing instrument and a bakery stencil. This technique requires an airbrushing unit, which applies a food-grade coating to the product. The size of the symbol may vary based on the size of the baked good being marked, but the shape of the symbol can remain consistent. The coating should be a contrasting color so the symbol stands out from the food product (perhaps white or green). Equipment for this application is readily available with cost of airbrushing and airbrushing unit being less than \$500 for manufacturers plus the cost of the color coating and labor to apply it.

- **Frosting:** A standardized symbol can be applied to baked goods using frosting. The frosting can be applied to a baked good in the shape of the standard symbol, or the frosting can be used to attach a symbol made from another substance (e.g. sugar formed into the shape of the selected symbol). The ongoing costs for this method of marking would be limited to material costs (e.g. manufactured frosting, sugar, flour, etc.).
- **Branding:** A standardized symbol can be applied to baked goods using a stencil or a branding device. Stencils and branding devices can be made in any form, including the form of the symbol selected by the MED. Manufacturers can impress the stencil or branding device into the baked good either in the dough phase (for certain cookies) or after it is baked but before it hardens (for brownies, cakes, granola bars), which will leave a clear imprint of the symbol on the baked goods. Stencils/branding devices can be made or purchased for very little cost.

#### **Chocolates and Hard and Soft Candies:**

Below are achievable methods of applying a symbol to chocolates and non-chocolate hard and soft candy, an explanation of the process required to apply a symbol to the products, and an estimate of the costs manufacturers would absorb when implementing the proposed marking techniques.

- **Molds:** A standardized symbol can be applied to chocolate and non-chocolate hard and soft candies (e.g. lozenges, suckers, hard drop candies, gummy candies, chewy chocolate candies, etc.) using a mold. This would require purchasing molds that contain the standardized symbol selected by the MED. Molds can be purchased for between \$5,000 and \$10,000, and made into any form. The molds are usable for years, and the only reoccurring costs would be replacing worn-out molds. I recommend that MED select one symbol and apply it for all chocolates, and non-chocolate hard and soft candies. This would allow manufacturers to use the same mold for all chocolates regardless of the THC content in each piece. It is my understanding that manufacturers make products with varying THC contents. Some pieces have as little as three (3) milligrams THC, some have five (5) milligrams THC, and some have 10 milligrams THC. As long as MED requires the same symbol on each product, regardless of THC content, manufacturers should be able to use the same mold when manufacturing all of their chocolate products. Furthermore, I believe manufacturers could use the same molds to produce marked chocolates as well as non-chocolate hard and soft candies. Doing so would obviously cut down on manufacturers' costs.

**Response to Cost Estimates from Other Work Group Members:** Other members of the Work Group quoted mold prices much higher than the \$5,000- \$10,000 I have quoted. One Work Group member offered holiday chocolate bunnies and Santa Claus figures as a model for the mold prices. However, such molds are generally very large and highly detailed. I assume, and would recommend, that the symbol selected by the MED be far

less detailed than these holiday examples. A simpler design will not take away from the effectiveness of the symbol, and will help cut down costs for manufacturers.

Some of the high estimates for the cost of molds from other Work Group members assume that manufacturers would need different molds for products with different THC levels. However, I would urge the MED to use the same symbol for all chocolates and non-chocolate hard and soft candies. Doing so will allow manufacturers to use the same molds for all chocolate products, and will greatly reduce costs for manufacturers.

The conversations I have had with mold manufacturers that have created molds for marijuana-infused product manufacturers, and the examples of molded infused products offered during Work Group meetings indicate that the high cost estimates from other Work Group members are inaccurate. These estimates may reflect quotes that Work Group members have received, but without question, there are alternatives that are equally effectual and more cost-effective. Based on my conversations with mold manufacturers that have created molds for marijuana-infused product manufacturers, I am confident that molds can be purchased for the \$5,000-\$10,000 I quoted above.

- **Airbrushing and Stenciling:** Additionally, standardized symbol can also be applied to chocolate and non-chocolate hard and soft candies (e.g. lozenges, suckers, hard drop candies, gummy candies, chewy chocolate candies, etc.) using an airbrushing instrument and a stencil. Even in applications as small as Gummy Bears and Lemon Drops, the standardized symbol can be applied to gummy candies and hard candies using an airbrushing device and stencil. While the process of applying the symbol to such products may be tedious, I am confident that a symbol can be applied in a recognizable manner, and will remain for an extended period of time. Of course, the size of the symbol will vary based on the size of the candy being marked, but the shape of the symbol can remain consistent. Because almost all (if not all) manufacturers are not automated, meaning they are still producing their products by hand, airbrushing is accomplishable at a very low cost. Equipment for this application is readily available with cost of stencil and airbrushing unit at less than \$500 for manufacturers plus the cost of the color coating and labor to apply it.

#### **Additional Methods for Marking a Variety of Edible Marijuana Products:**

- **Edible Film:** If manufacturers find airbrushing too tedious, another viable option would be edible film. Edible film is a technology that is out there currently and could be used for almost all edibles. To understand this technology you just have to think of breath strips that are currently on the market, or something that is similar to Saran Wrap. I have talked with manufacturers who have this technology and said that any wording or symbol can be printed on this edible film and would adhere to almost any solid food product with a heat gun or other type of applicator. It could come in any size depending on the food product it was going on. Edible film can be purchased for approximately \$150 per pound and

applied at a reasonable cost. In my estimation, the cost per unit of product would be less than \$0.05 per product.

There is another type of edible film that is being manufactured and is currently being used for a wide variety of foods. It comes in the form of small flakes or specs that can be mixed in with bulk food or suspended in liquids. These very tiny edible pieces can be produced in any color and nearly any shape including a marijuana leaf or a symbol designated by the state. The color and shape of these edible pieces would have to be chosen carefully, however, so they would not appeal to children in any way.

- **Color:** Finally, I'd like to bring up color as one of the most economically feasible options to distinguish marijuana edibles. Almost any food item can be colored, but I would recommend this as the best option for bulk foods and liquids. The costs would be nominal and the technique extremely simple to apply. Natural food colorings are available if a manufacturer so desires, however it would be a slight up charge just like it is with other natural food products. Color could be a very effective indicator of food/drink that contains marijuana, but the state would have to determine what color it wants to use. A unique color could be developed and patented by the state, which could be used by edible manufactures to indicate the presence of marijuana. I assume the state would want to choose a non-traditional color with a few examples including: silvery/grey, terracotta, teal or a multitude of other unique colors. There are companies out there that specialize in developing colors. I am sure they would have a wide variety of unique colors from which to choose.

## Appendix O: Stakeholder Submission - Using Custom Molds for Chocolate or Baked Goods

**Submitted By: Work Group member Jaime Lewis, Vice-President, Good Chemistry/Mountain Medicine, October 29, 2014**

Designing a custom chocolate mold and food-grade molds for baked goods is a difficult and expensive process. The expense of these molds is due to the required die casting and injection processes. To make a custom chocolate mold, you generally will pay an upfront set-up charge, which partly covers the design process. Most people underestimate the complexities of their designs.

Think about the holiday chocolate novelties you see in the store. Those chocolate bunnies and Santa's are truly works of art and are very complex to engineer. They are created using polycarbonate molds, which are made by injection. The die for the machine that injects the material is very expensive. Another cost factor is that, depending upon the product or design, you may need an injection mold that is made of aluminum, or special irons. The process used to manufacture the mold itself is costly. An injection mold for a standard polycarbonate mold which would make fifteen (15) individual, six (6) gram chocolates can cost \$25,000. Making each mold around \$1,666.00.

The same example holds true for 10 mg, 5 mg and 3 mg products. Three hundred (300) molds would need to be produced. One hundred (100) molds to say 10 mg and stamped/marked; one hundred (100) molds to say 5 mg and marked; and one hundred (100) molds to say 3mg and marked, with a total cost of \$499,800 for 300 molds.

It is important to note that having more molds makes a commercial kitchen more efficient and easier from both a production standpoint, as well as keeping labor costs down. However, this is cost-prohibitive for the marijuana edibles manufacturers at this time.

The process of stamping, shaping or coloring of baked goods makes finding a viable solution very difficult for the cannabis edible manufactures, as most of the molds and stamping are made for chocolates and candies. Baked goods such as brownies and cookies are porous, have a tendency to spread or easily become misshapen.

You can have a polycarbonate mold thermoformed, which is less expensive but is not the best mold technology for commercial use. To better understand the processes identified above, the options are defined below:

**Thermoforming** is a process whereby plastic is heated until it sags, is draped over a model, and then a vacuum sucks all the air out so the plastic forms to the shape of the model. The plastic is left to cool and the model is popped out. You are then left with a chocolate mold. This process is used when making thin plastic hobby or short-run molds. While less



expensive, these are not the best molds to use for commercial manufacturing of edible products.

**Casting** is a method of using a liquid or putty resin system to form a chocolate mold. A model is placed in a box; the resin is prepared and then poured over the model. It is left to sit in order to cure. Resin molds can be made of different hardness, or durometers. They can be flexible or rigid, colored or transparent. Most artisan chocolatiers who make their own molds use platinum-cured, food-grade silicone rubber. The important point in using a casting method is the reduction of air bubbles. This is accomplished by placing the resin in a vacuum chamber to extract air while it is curing. Platinum cured silicone is very expensive, but offers the greatest variety of possibilities.

Professional polycarbonate chocolate molds used by most chocolatiers are made from **injection molding**. Injection molding is an expensive and time-consuming process to set up. It is suitable when large quantities of molds are to be made. In injection molding, a metal mold is made by high-speed milling machines or electrical discharge machining (EDM) equipment. The mold is inserted into the injection-molding machine. Plastic comes in small pellets and is heated to melt. Once melted it is forced into the mold and clamped with high pressure. The clamp is released once the plastic has set and hardened. This is the same process for making any other type of plastic part.

## Appendix P: Current Universal Symbol for which Revisions are Recommended





## Appendix Q: Summary of Sub-Recommendations by Category

1. Take No Action at this Time to Identify Edible Marijuana Products	
No.	Sub-Recommendation
7.1	Take no action at this time to make edible retail marijuana products clearly identifiable, in order to determine if the rules currently in place to regulate these products are sufficient to ensure that the public can identify them and avoid accidental ingestion.

2. Strengthen Packaging and Labeling Requirements	
No.	Sub-Recommendation
1.2	Marijuana edible products that cannot feasibly be individually imprinted should be packaged and labeled in a way that: <ol style="list-style-type: none"> <li>Clearly displays the agreed-upon, universal symbol; and</li> <li>Includes clear warning statements such as “Keep out of the reach of children,” “Harmful if ingested by children,” “For adult use only,” “Do not operate motor vehicles or heavy equipment if taken,” and “Keep in original packaging until consumed.”</li> </ol>
5.1	Require additional labeling on edible retail marijuana products to indicate that the product must stay within its original package until consumed, and that failure to comply could result in possible legal action and liability.
6.1	Reconfigure the universal symbol currently used on labels for edible marijuana products to include a marijuana leaf behind the current symbol, which is attached in Appendix P. Allow manufacturers to use this symbol as a watermark on the label, which will enable them to increase its size without having to create larger labels.
6.2	Reduce and clarify the language currently required on the labels of edible marijuana products, to focus on the most important safety issues.
6.3	Include the following statement on labels for edible marijuana products: “For safety, keep this product in its original packaging until consumed.”
7.2	If the current rules are found to be insufficient for ensuring that the public can identify edible marijuana products and avoid accidental ingestion, revise the current labeling requirements and implement education programs.
9.1	All edible retail marijuana products should be labeled with a universal seal that includes either a marijuana leaf or the letters “THC.” The seal should also communicate that the product: <ol style="list-style-type: none"> <li>Contains marijuana;</li> <li>Was made by a licensed manufacturer;</li> <li>Is regulated by the Colorado Marijuana Enforcement Division; and</li> <li>Should be stored in its original packaging until consumed, and kept out of the sight of persons under 21 years of age and pets.</li> </ol>
9.2	The warning labels currently required by statute should be reviewed, and any unnecessary wording should be removed, in order to make the seal more visible and ensure that the verbal information that is presented is clear, concise, and easy to read.

## 2. Strengthen Packaging and Labeling Requirements (con't)

No.	Sub-Recommendation
9.3	The following labeling requirements should be REMOVED: <ol style="list-style-type: none"> <li>Statement regarding child-resistant packaging;</li> <li>Statement about having passed contaminant testing;</li> <li>List of non-organic pesticides, herbicides, and fungicides;</li> <li>Warning about oversight;</li> <li>Batch number for oils.</li> </ol>
9.4	The following labeling requirements should be MODIFIED: The statement related to the serving size, number of servings, and total amount of active THC in the product should be more clearly communicated and displayed.
11.1	Focus on improved labeling as the means of identifying edible marijuana products, including the use of a message such as “THC: This is Cannabis” or a similar symbol on all labels.
14.1	<u>Symbol:</u> Choose a universal symbol or marker for edible marijuana products that can be readily recognized by the general public. This choice should be made based on a review of scientific data, evidence-based practices, and research to include the use of focus groups, to ensure that the symbol is not inadvertently attractive to children.
14.2	<u>Labeling:</u> Review the current labeling requirements for edible retail marijuana products to ensure that they are clear and appropriate. For example, the inclusion of a nutritional fact panel on edible marijuana products may create confusion among consumers that the product is similar to traditional food.
14.3(b)	Develop new regulations to require: <ol style="list-style-type: none"> <li>Child-resistant packaging.</li> </ol>
16.1	<u>Child-Resistant Packaging:</u> Ensure that requirements on child-resistant packaging for edible marijuana products are adequate. Consider a requirement that each 10mg single serving is in its own child-resistant packaging. Consider legal repercussions for removing a product from its child-resistant packaging other than at the time of use.
16.2	<u>Review Labeling Requirements:</u> Update the standardized symbol to clearly indicate that the product contains marijuana. Review the current requirements and include language that directs the consumer to keep the product in its original packaging and store the product locked and out of reach from children.

### 3. Identify Edible Marijuana Products Outside their Packaging

No.	Sub-Recommendation
1.1	<b>All pills, chocolate, hard candy, and soft candy that contain marijuana should be imprinted with the agreed-upon, universal symbol.</b>
3.1	<b>All marijuana-infused edible products should be made “clearly identifiable” as containing marijuana. Following are general descriptions of how a standard symbol can be applied to baked goods, chocolate, hard candy, soft candy, bulk foods, liquids, and pills. Appendix J presents the list developed by this Work Group of edible products currently on the market, with a more detailed description, in Smart Colorado’s view, of how each can be made clearly identifiable as containing marijuana.</b>
3.2	<p><b>Baked Goods:</b> All marijuana-infused baked goods should be required to bear the standard symbol. Below are methods that can be used to apply the symbol to various types of baked goods.</p> <p><b>Brownies:</b> (1) Airbrushing the standard symbol on the brownie using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which brownie batter can be poured; (3) Use of a stencil or branding instrument to imprint the standard symbol on the brownie after it has been baked and before it hardens; or (4) Application of frosting in the shape of the standard symbol.</p> <p><b>Cookies:</b> (1) Airbrushing the standard symbol on the cookie using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which cookie batter can be poured; (3) Use of a stencil or branding instrument to imprint the standard symbol on the cookie after it has been baked and before it hardens; or (4) Application of frosting in the shape of the standard symbol.</p> <p><b>Cakes:</b> (1) Airbrushing the standard symbol on the cake using a stencil and organic or nonorganic food coloring; (2) Use of a mold into which cake batter can be poured; or (3) Application of frosting in the shape of the standard symbol.</p> <p><b>Granola Bars:</b> (1) Airbrushing the standard symbol on the granola bar using a stencil and organic or nonorganic food coloring; or (2) Use of a stencil or branding instrument to imprint the standard symbol on the bar.</p> <p><b>Crackers:</b> Airbrushing the standard symbol on the crackers using a stencil and organic or nonorganic food coloring.</p> <p><b>Pastries:</b> Airbrushing the standard symbol on the pastries using a stencil and organic or nonorganic food coloring.</p> <p><b>Superfood:</b> (Go Chi Ball/Zoom Ball): Airbrushing the standard symbol on the balls using a stencil and organic or nonorganic food coloring.</p>
3.3	<b>Chocolate, Hard Candy, Soft Candy:</b> All marijuana-infused chocolate, hard candy including lozenges, and soft candy including gummies should be required to be marked using one of the following methods: (1) Airbrushing the standard symbol on these products using a stencil and organic or nonorganic food coloring; (2) Use of a mold to imprint the standard symbol on these products; or (3) Use of a stencil or branding instrument to imprint the standard symbol on these products before they harden.
3.4	<b>Bulk Foods, Liquids, and Pills:</b> All edible marijuana bulk foods (e.g. nuts, popcorn, cereal, granola and trail mix), liquids (e.g. coffee, juice soft drinks, tea, sauces, and cooking oils), and pills should be symbolized with a standard color, which should be unique and unlike colors appearing in existing food products. Coloring bulk items and liquids can be achieved by application of organic or nonorganic food coloring in the standard color. For bulk foods, manufacturers can use an airbrush tool to apply the standard color.

**3. Identify Edible Marijuana Products Outside their Packaging (con't)**

No.	Sub-Recommendation
4.1	Whenever it is possible to apply a symbol to an edible marijuana product itself, marijuana manufacturers must be required to do so, rather than relying on the product's packaging to serve as the means of identifying that it contains marijuana.
14.3(a)	Develop new regulations to require: a. A method to identify edible marijuana products outside their packaging.
15.1	Imprint all edible marijuana products with a universally recognized symbol or unique color to indicate that they contain marijuana.
15.3	Promulgate rules related to imprinting edible marijuana products and require that the Marijuana Enforcement Division certify each imprinting method to be allowed.
16.3	<u>Mark Individual Products:</u> Individually mark products through molding/shaping, stamping/imprinting, or airbrushing/stenciling them to include the standardized symbol indicating the presence of marijuana in the product. Hard candies, soft candies, chocolate bars, pills, and capsules should all be marked.

**4. Limit or Ban Categories of Edible Marijuana Products or Particular Products**

No.	Sub-Recommendation
10.1	The production of retail edible marijuana products should be prohibited, with the exception of (1) lozenges and hard candies; and (2) tinctures. Both types of allowed products should be clearly labeled using the universal symbol.
10.2	Lozenges or hard candies should be manufactured in single 10 mg doses and both types of allowed products should include clear dosing information on their labels.
14.4	<u>Product Advisory Commission:</u> Create a Marijuana Product Advisory Commission with authority to grant pre-market approval for all edible marijuana products, and to recommend policies and give guidance in regard to packaging and labeling. The Commission would be composed of a wide range of experts who would review the product, its appeal to children, and the appropriateness of the packaging and labeling before the product is marketed.
15.2	Prohibit the manufacture and sale any edible marijuana product that does not lend itself to imprinting with the universally recognized symbol or unique color, given that these products cannot be rendered immediately identifiable as containing marijuana.
16.4	<u>Limit Products:</u> Consider placing limitations on which edible marijuana products can be manufactured and sold, with particular attention on limiting those that are made to be very similar to, or even identical to popular candies. The manufacture of these products may also constitute trademark infringements.

## 5. Increase Consumer Education

No.	Sub-Recommendation
2.1	<p>The Governor's Office of Marijuana Coordination and the Colorado Department of Public Health and Environment, using funds from the Marijuana Tax Fund, should coordinate the following educational campaigns:</p> <ol style="list-style-type: none"> <li>A "Start Low, Go Slow" campaign advising new consumers to initially use considerably less than a single 10-mg dose of THC and to wait at least two hours before further ingestion, to reduce accidental over-ingestion by adults.</li> <li>An adult education campaign that would (1) advise consumers to keep marijuana products out of the sight and reach of children and store them in their original, child-proof packaging; (2) urge honesty with health care providers about the products consumed in the event of accidental ingestion by a child; and (3) give parents tools for open, honest conversations with their children about alcohol, marijuana and illegal drugs.</li> <li>A campaign to remind the public that purchases of marijuana products from any source other than a licensed store is illegal, and that black market products do not offer quality control, safety testing, informational labels, or child proof packaging. This campaign could be connected to the "Drive High, Get a DUI" campaign and coordinated with high-profile law enforcement actions against black market providers operating through public venues such as Craigslist.</li> </ol>
6.4	Commence consumer education programs to raise awareness about the universal symbol and instruct the public about how to safely store edible marijuana products and keep them out of the reach of children.
7.2	If the current rules are found to be insufficient for ensuring that the public can identify edible marijuana products and avoid accidental ingestion, revise the current labeling requirements and implement education programs.
9.6	The state should commence a robust consumer education campaign to advise adults how to speak with their children about marijuana use and how to store marijuana safely and out of the sight and reach of persons under the age of 21 and pets. This campaign should include clear messaging about the legal ramifications and consequences of consuming marijuana for people under 21, and of distributing marijuana to persons under 21.
14.5	<p><u>Education</u>: Coordinate an education campaign that:</p> <ol style="list-style-type: none"> <li>Provides information for parents, guardians, and children to readily identify edible marijuana products by the universal symbol.</li> <li>Teaches the importance of safe storage of marijuana products, and particularly edible marijuana products, with messaging to include keeping these products out of sight, out of reach and locked from access by anyone under 21 years of age.</li> <li>Develops and disseminates marijuana educational resources for parents.</li> </ol>
16.5	<u>Educate Parents</u> : Educate parents on the safe storage of edible marijuana products, namely locked up and in their original child-resistant packaging. Provide parents with tools to educate their children about edible marijuana products and other legal and illegal substances.

## 6. Improve Data Collection and Analysis

No.	Sub-Recommendation
9-5	<p>The state should put into place comprehensive measures for tracking and collecting data on accidental and unintentional over-ingestion of marijuana products, and on the possession and use of marijuana products at schools.</p> <ol style="list-style-type: none"> <li>a. Poison control centers and hospitals should be required to collect the following information about cases of over-ingestion of marijuana products: (1) the source of the marijuana product, including whether it was acquired from a licensed marijuana establishment or on the black market; (2) how the product was stored before the ingestion took place; and (3) the circumstances under which the product was ingested, including whether the ingestion was accidental or intentional.</li> <li>b. School resource officers should be required to collect the following information when marijuana is found in the possession students: (1) the source of the marijuana product, including whether it was acquired from a licensed marijuana establishment or the black market; and (2) the type of product found in the possession of students.</li> </ol>
11.2	Collect and analyze data on (1) the number of edible marijuana products produced and sold in Colorado; (2) the number of cases of accidental ingestion by children at all hospitals in Colorado; and (3) whether these cases are from edible marijuana products purchased from licensed marijuana establishments, purchased on the black market, or made at home.
12.1	Collect the following data in 12.2 and perform the following analyses in 12.3 in order to study the costs, benefits, and practicability of any future regulations related to edible marijuana products.
12.2	<p><b>Data Collection:</b></p> <ol style="list-style-type: none"> <li>a. The number of incidents per year statewide related to the ingestion of edible marijuana products, including calls to poison control centers, emergency room visits, and hospital admissions.</li> <li>b. The nature of these incidents – accidental or intentional, involving adults and children.</li> <li>c. The source of the ingested marijuana products - regulated market, black market, or home production.</li> <li>d. The outcomes of these incidents.</li> </ol>
12.3	<p><b>Data Analysis:</b></p> <ol style="list-style-type: none"> <li>a. Compare the rates of incidence and severity of outcomes for over-ingestion of edible marijuana products to those for over-ingestion of other products, among different age groups.</li> <li>b. Estimate the compliance costs to manufacturers for different ways of identifying edible marijuana products – e.g., marking, shaping, and coloring. Include both initial capital costs and continuing costs.</li> <li>c. Determine the cost per quality-adjusted life year (QALY) for potential regulations related to edible marijuana products. Compare to other public health interventions and regulations in other industries.</li> </ol>
16.6	<p><b>Data Analysis:</b> Collect and report data on the consumption of edible marijuana products, including over-consumption, unintentional ingestion, and illegal possession and consumption by youth. Consider the following possible resources for collecting data: first responders, law enforcement officers, school resource officers, hospitals, poison control centers, departments of public health, and departments of human services.</p>

### 7. Other –Testing Facilities and Product Safety

No.	Sub-Recommendation
13.1	<i>Allow persons without marijuana establishment licenses to use the services of state-licensed marijuana testing laboratories. These persons may include parents, school officials, marijuana users, and other parties wishing to know if a product contains marijuana, how much it contains, and if it is safe for consumption.</i>
14.3(c)	<i>Develop new regulations to require: c. That edible marijuana products be produced, stored, and transported in a manner that keeps them free of harmful, food-borne pathogen and maintains product integrity.</i>